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Higher Education Area

BOLOGNA PROCESS MALTA

bologna process

THE IMPACT OF THE BOLOGNA PROCESS ON HIGHER EDUCATION INSTITUTIONS IN MALTA

An overview of the targets achieved and future challenges

NATIONAL TEAM OF BOLOGNA EXPERTS MALTA 2009-2011

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An overview of the targets achieved and future challenges

NATIONAL TEAM OF BOLOGNA EXPERTS (2009-2011)

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Hon. Dolores Cristina

Minister of Education, Employment and the Family

Higher Education is today the gateway to employability.

More and more sectors are increasingly becoming dependent upon specialised learning and on skills and competences which can only be achieved if a person considers Higher Education as a challenge to be met at the earliest stages of life.

I am, therefore, particularly pleased to see that the National Team of Bologna Experts (Malta) is taking this initiative to present to all stakeholders an overview of the impact of the Bologna Process on Higher Education in Malta as a working tool for its activities in the 2009-2011 cycle.

The Bologna Process is history in the making. Initiated in 1999, it managed (over a relatively short period of time) to provide a new European culture for Higher Education through a more harmonised system of qualifications, quality assurance, as well as greater transparency in the learning process. Linked with the Lisbon Strategy, the Bologna Process is another step towards more structured mobility in Europe.

An increasing number of Universities and Higher Education institutions in 47 countries are committed to the goals of the European Higher Education Area (EHEA) which are: (i) to facilitate mobility of students, graduates and Higher Education staff, (ii) to prepare students for their future careers as active citizens in democratic societies and support their personal development and (iii) to offer broad access to high quality education based on democratic principles and academic freedom.

Since 1999, seven Ministerial Meetings have forged the structure of what today is the European Higher Education Area. The next Bologna Ministerial Meeting will be held in Bucharest on the 26 and 27 April 2012. This publication follows a series of fora organised in Malta by the National Team of Bologna Experts on: Quality Assurance, Employability and Student-centred learning, amongst others.

Higher Education is the key to employment in an increasingly competitive labour market. Equally important is the fact that our own Higher Education institutions are gearing towards attaining a higher quality in teaching and research and systematically linking the world of training with that of direct work experiences. The three leading public providers of Higher Education in Malta (the University of Malta, the Malta College of Arts, Science and Technology and the Institute of Tourism Studies) are matching theory with practice giving learners the opportunity to test their skills and competences in real life

situations. This is not just an added value for Higher Education in Malta but also an added attraction to Higher Education.

I hope that this document will serve to inspire our ongoing debate on Higher Education, provide the basis for reform and innovation and help stakeholders steer the education sector towards higher levels of excellence.

Dr James Calleja

Coordinator, National Team of Bologna Experts (Malta)

The aim of this working document is to assess the impact of the Bologna Process on Higher Education institutions in Malta by providing an overview of the targets and initiatives within the Higher Education sector. A number of indicators have been taken as points of reference of this research namely: the European Credit Transfer System, the Diploma Supplement, Quality Assurance, mobility of students and staff, research and innovation and industry's opinion on the quality of our graduates.

The results evidenced in this document are encouraging and challenging at the same time. This is one sector in which Malta is on track with other countries within the European Union. Of course this does not imply that we have achieved all targets set within the Bologna Process but the initiatives taken and the quality and standards of our learning institutions show that Malta has a solid Higher Education system in which learners are well prepared to meet the challenges of the labour market.

If results achieved, particularly within the University of Malta, are encouraging, the same can be said of the Malta College of Arts, Science and Technology, the Institute of Tourism Studies and other public and private Higher Education Institutions that are aware of such challenges and are seriously working towards achieving higher standards of quality in their teaching and research sectors.

Malta was one of the founding signatories of the Bologna Process. Malta has followed every Bologna Follow Up Group (BFUG) and Bologna Ministerial Meeting with keen interest. Timely and adequate actions have been taken to ensure that innovation and change match tradition and acquire standards through the experience gathered in this sector since the founding of our Alma Mater in 1592. The response from our Higher Education institutions has been encouraging even though a *Bologna Culture* is still in the making in some of our Higher Education Institutions. Seven Bologna Meetings have been organised during the past few months as part of the 2009-2011 Bologna cycle. The objective of these seminars is to raise more structured awareness on our campuses of the strengths and benefits of the Bologna Process for both students and Faculty members.

A significant contribution has been given to the Bologna Process in Malta by the setting up, in June 2007, of the Malta Qualifications Framework for Lifelong Learning based on the level descriptors as defined by the Dublin descriptors for Higher Education and those of the European Qualifications Framework as adopted by the European Parliament in April 2008. The framework has also been complemented with the publication of the *Referencing Report* by the Malta Qualifications Council, which further delineates the qualifications' structure and the Higher Education System in Malta. This Framework has helped Malta

become more attractive as a destination for Higher Education; it provides the foundation for making Malta a centre of excellence in Higher Education.

I would like to thank the European Union Programmes Agency for the sterling support it provided to all the colleagues on the National Team of Bologna Experts (NTBE) for their professional contributions made throughout these past years.

I wish to take this opportunity to thank Dr. Suzanne Gatt for preparing of this research paper and Ms. Mary Jane Mifsud and Mr. Karl Mintoff, of the European Union Programmes Agency, for providing the administrative and technical support to the NTBE.

A final word of thanks goes to all my colleagues at the Malta Qualifications Council and the National Commission for Higher Education particularly Ms Debbie Lora Dimech who coordinated all events and publications.

Introduction

Dr Suzanne Gatt

B.Ed. (Hons), M.A (London), Ph.D

Policies on a European and National level have many times been based on the Lisbon Strategy, which set the target of making the European Union the most competitive and dynamic knowledge-based economic area in the world by 2010. This was the result of the European Council meeting which took place in Lisbon, Portugal, in March 2000, where EU leaders adopted a ten-year programme aimed at revitalizing growth and sustainable development across the Member States of the European Union. The Lisbon Strategy is Europe's response to the challenges of globalisation, an ageing population, and the emergence of a worldwide information society[1]. The strategy aimed at setting the European Union as "a *new strategic goal* for the next decade: *to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*."

The EU Member States have met and worked together to try and achieve the targets set. Member States recognised that the provision of quality education is a prerequisite for a skilled workforce, and that education and training also play a very important role. To achieve this ambitious goal, there was the need not only for a radical transformation of the European economy, but also for a challenging programme for the modernisation of social welfare and education systems. The Education Council and the Commission endorsed a 10-year work programme - known as the Education and Training 2010 programme - to be implemented through the open method of coordination.

The EU 2020 strategy was published in March 2010. It states that the main aim of the European Union, is that of identifying the best possible strategy to get out of the current global economic crisis. It also aims at turning the EU into a smart, sustainable and inclusive economy with high levels of employment, productivity and social cohesion. Europe 2020 sets out a vision of Europe's social market economy for the 21st century.

The EU 2020 strategy puts forward three mutually reinforcing priorities:

(i) smart growth: developing an economy based on knowledge and innovation;
(ii) sustainable growth, promoting a more resource efficient, greener and more competitive economy; and
(iii) inclusive growth, fostering a high-employment economy delivering social and territorial cohesion.

One of the targets set is that of increasing the number of graduates to 40% across Europe. This target can also have an impact on the Bologna Process, as a higher number of graduates will require an increase in mobility periods as well as easier recognition of tertiary qualifications for both employment and further studies' purposes.

It is of interest to note that reforms in Higher Education on a European Level had started just one year before the Lisbon Strategy, in 1999 with the birth of the Bologna Process. The Bologna Process, founded in 1999, has been crucial to the development of the European Higher Education Area and consequently contributed actively to the achievement of the Lisbon objectives and now also to the EU 2020 strategy. Even though it operates on a voluntary basis, the Bologna Process has proven to be effective and much

1 http://www.etuc.org/a/652

has been achieved as it approaches its thirteenth year of operation. However, many problems have also been encountered. Europe is made up of diverse countries, with different cultures, modes of thinking as well as different structures particularly at tertiary level of education. It was thus a great challenge to develop structures and frameworks providing harmonization whilst still respecting the different cultures. It is not the aim of the Bologna Process to have one University structure but rather, diverse areas of studies which complement each other and are comparable in quality and level. Issues which have lead to great discussion include: the transfer of credits, study cycles, and quality assurance, amongst others.

Malta has been involved in the Bologna Process from the beginning, being one of the first signatories in 1999. This has led the University of Malta to bring about reforms in its structures which not only allow the University itself to retain its international dimension, but also to be part of the European Higher Education Area. The year 2009 has witnessed the introduction of professional degrees by the Malta College of Arts, Science and Technology (MCAST). The latter has extended the Education institutions to which the Bologna Process is relevant.

This paper looks at the impact and significance of the Bologna Process in Malta. It analysis the direct impact of the Process on the University of Malta, as well as on other Higher Education institutions, mainly the Malta College of Arts, Science and Technology (MCAST) and the Institute of Tourism Studies (ITS) in terms of the implementation of the ECTS system and issuing of the Diploma Supplement. The impact of issues related to the ERASMUS exchange programme and quality assurance within tertiary education are also assessed. On a wider aspect, the paper also considers the dimensions of research and development as well as the quality of new graduates in preparation for the local labour market.

This research paper analyses the reforms that need to be in place on a local level in order to attain the government's Vision 2015 to develop Malta into an international centre of excellence. Particular attention is given to the seven sectors identified within this vision by the government of Malta. These are: Information and Communication Technology; Financial Services; Tourism; Education; Health; High Value-Added Manufacturing and Services; and Gozo as an ecological island.

Chapter 1:
The Bologna Process and the 2010 targets

1. 0 Introduction

This chapter looks at the international developments of the Bologna Process since its inception in 1999. One can take stock of the recent developments in Malta by outlining the work done collectively by the Ministers of Higher Education. This chapter will thus provide the scenario against which the situation of Higher Education in Malta can be compared.

1.1 From Bologna to the Budapest-Vienna Declaration in 2010

The Bologna Process started in 1998 when the Ministers responsible for Higher Education in the European countries of France, Italy, the United Kingdom and Germany recognised the need of restructuring Higher Education across Europe and signed the '***Sorbonne Declaration***'[2] on the 'harmonisation of the architecture of the European Higher Education system'. In the Sorbonne Declaration, the signatory countries agreed to work together towards having:

- a convergence of the overall Higher Education framework and cycle in an open European Area for Higher Education;
- a common degree level system for undergraduates (bachelor degrees) and graduates (master and doctoral degrees); and
- enhancing student and teacher mobility, removing obstacles for mobility and improving recognition of degrees and academic qualifications.

The initiatives were viewed positively by a number of other countries. In 1999, this lead 29 European Ministers in charge of Higher Education to meet in Bologna and sign the ***Bologna Declaration***[3]. This declaration laid the basis for establishing a European Higher Education Area (EHEA) by 2010. Malta was amongst the signatories of the Bologna Declaration, represented by the Minister of Education, Youth and Employment.

The Bologna Declaration listed 6 key issues:

- Adopting a system of easily readable and comparable degrees;
- Adopting a system of two main cycles (undergraduate/post-graduate);
- Establishing a system of credits (such as ECTS);
- Promoting mobility by overcoming obstacles;
- Promoting European co-operation in quality assurance; and
- Promoting European Dimension in Higher Education.

The Ministers agreed to meet again after two years to analyse developments and ways forward. It was also agreed that most of the work done was to be on a voluntary basis, taking on a bottom-up approach.

Ministers met again in Prague in 2001 to follow up the process, as well as to set directions and priorities for the following two years. In the *Prague Communiqué* Ministers reaffirmed their commitment to the objectives of the Bologna Declaration, and appreciated the active involvement of the European University Association (EUA) and the then National Unions of Students in Europe (ESIB), now the European Students' Union (ESU). Ministers also took note of the constructive assistance of the European

2 Ministers in charge of France, Germany, Italy and United Kingdom, 1998, Sorbonne Joint Declaration on the Harmonisation of the Architecture of European Higher Education System.
3 Joint Declaration of the European Ministers of Education, 1999, the Bologna Declaration of 19 June 1999.

Commission in the process. The Prague Communiqué[4] highlighted the importance of key elements such as: Lifelong Education; the active involvement of students; and the need to enhance the attractiveness and competitiveness of the area to other parts of the World beyond Europe.

The ministers' meeting in Berlin defined 3 intermediate priorities as part of the *Berlin Communiqué*[5]. These included:

- work to develop quality assurance systems at Institutional, National and European Level;
- further development of the two-cycle system; and
- promotion of the recognition of degrees and periods of study.

Ministers stressed the need to develop mutually shared criteria and methodologies and agreed that by 2005 national quality assurance systems should include:

- a definition of the responsibilities of the bodies and institutions involved;
- an evaluation of programmes or institutions including internal assessment, external review, participation of students and the publication of results;
- a system of accreditation, certification or comparable procedures; and
- international participation, co-operation and networking.

Ministers asked for an overarching framework of qualifications for the European Higher Education Area. Degrees should have different pre-defined outcomes. First and second cycle degrees should have different orientations and various profiles in order to accommodate the diversity of individual, academic and labour market needs. Ministers considered it necessary to go beyond the focus on two main cycles of higher education and to include the doctoral level as the third cycle within the Bologna Process.

This was adopted to promote closer links with the European Research Area (ERA). This was the tenth action of the Bologna Process. Ministers entrusted the BFUG with an organised stock-taking exercise for the summit held in Bergen in May 2005. National reports by each country were published online by the end of January 2005.

The *Bergen Communiqué*[6] underlined the complementarities between the overarching framework for the EHEA and the broader framework of qualifications for lifelong learning encompassing both general and vocational education. Education Ministers stressed that in order to achieve better results, the synergy between the higher education sector and other research sectors throughout countries needed to improve. To achieve these objectives, doctoral level qualifications needed to be fully aligned with the EHEA overarching framework for qualifications using the outcomes-based approach. Ministers entrusted the BFUG with inviting the European University Association and other interested partners, to prepare a report on the further development of the basic principles for doctoral programmes, to be presented in 2007.

Ministers also stressed on the social dimension issue and renewed their commitment to making quality Higher Education equally accessible to all. Ministers also insisted on the importance of providing adequate conditions for students to complete their studies without facing obstacles related to their social and economic background. They also recognised that mobility of students and staff amongst all participating countries remained one of the key objectives of the Bologna Process and that many challenges still needed to be overcome. Ministers committed themselves to intensify their efforts to lift obstacles to learning mobility.

4 Communiqué of the meeting of the European Ministers in charge of Higher Education, Towards the European Higher Education Area, Prague, 19th May 2001.

5 Communiqué of the conference of the European Ministers in charge of Higher Education, Realising the European Higher Education Area, Berlin 19th September 2003.

6 Communiqué of the conference of the European Ministers in charge of Higher Education, The European Higher Education Area - Achieving the goals, Bergen 19-20th May 2005;

The targets set included progress in:

- the implementation of the standards and guidelines for quality assurance as proposed in the ENQA report;
- implementation of the national qualifications frameworks;
- the awarding and recognition of joint degrees, including doctoral level; and
- the creation of opportunities for flexible learning paths in Higher Education, including procedures for the recognition of higher learning.

Education Ministers met again in London in 2007. In the *London Communiqué*[7], Ministers recognised that the developments over the previous two years were a significant step forward towards the realisation of the European Higher Education Area (EHEA).

An EHEA was being developed based on institutional autonomy, academic freedom, equal opportunities and democratic principles that would facilitate mobility, increase employability and strengthen Europe's attractiveness and competitiveness. Ministers reaffirmed their commitment to increasing the compatibility and comparability of European Higher Education systems, whilst at the same time respecting their diversity.

It was recognised that some progress had been made regarding mobility since 1999, however many challenges remained. Some of these obstacles identified, were; immigration, recognition, insufficient financial incentives and inflexible pension arrangements. Ministers for Higher Education agreed to work within their respective Governments to promote progress. They also agreed to encourage a significant increase in the number of joint programmes and the creation of flexible curricula. They insisted that National Qualifications Frameworks should be compatible with the overarching Framework for Qualifications of the EHEA as well as with the proposal of the European Commission on a European Qualifications Framework for Lifelong Learning.

It was recognised that the Standards and Guidelines for Quality Assurance (ESG) adopted in Bergen, served as a powerful driving force leading to changes in quality assurance mechanisms in most countries. External quality assurance, in particular, started being developed much better than before. The extent of student involvement at all levels of education also increased. Ministers of Education adopted the strategy *The European Higher Education Area in a Global Setting* and agreed to put forward more work in the core policy areas: improving information on, and promoting the attractiveness and competitiveness of the EHEA; strengthening cooperation based on partnership; intensifying policy dialogue; and improving recognition.

Ministers of Education concentrated on completing agreed Action Lines, including the ongoing priorities of the three-cycle degree system, quality assurance, recognition of degrees and recognition of study periods. Focus was placed on:

- promoting mobility of students and staff, including measures for future evaluation and setting up a network in which national experts can share information and help identify and overcome obstacles to the portability of grants and loans;
- reporting on national strategies and policies for the social dimension, including action plans and measures to evaluate their effectiveness;
- the improvement and the availability of data on both mobility and the social dimension across all the countries participating in the Bologna Process;
- asking the BFUG to consider ways how to improve employability in relation to each of the three cycles as well as in the context of lifelong learning;

7 Communiqué of the conference of the European Ministers in charge of Higher Education, Towards the European Higher Education Area: responding to challenges in a globalised world, 18th May 2007, London.

- requesting the BFUG to report back on overall developments and the implementation of the strategy for the EHEA in a global context, giving consideration to two priorities. First, to improve the information available on the EHEA, by developing the Bologna Secretariat website and building on EUA's Bologna Handbook; and second, to improve recognition;
- requesting the BFUG to continue the stock-taking process, based on national reports, in time for the 2009 Ministerial conference.

On 4 March 2008, the ***European Quality Assurance Register*** for Higher Education (***EQAR***)[8] was officially launched in Brussels. EQAR aimed at improving the quality of European Higher Education and promoting greater student mobility. The new register has been seen as a milestone for European cooperation in quality assurance in the context of the Bologna Process reforms. Under the mandate of Education Ministers from the 46 participating countries in the Bologna Process, the new register has been established by the "E4 Group" comprising the; European Association for Quality Assurance in Higher Education (ENQA), the European Students' Union (ESU), the European University Association (EUA) and the European Association of Institutions in Higher Education (EURASHE).

The aim of this new register (EQAR) has been that of providing clear and objective information about trustworthy quality assurance agencies that are working in Europe. It also aims to help improve the quality of European Higher Education and to promote greater student mobility by increasing mutual reliance between Higher Education institutions. The register provides means for HE institutions to choose between different agencies on the register. Participation in EQAR is voluntary, and based on compliance with the European Standards and Guidelines for Quality Assurance adopted by European Education Ministers in 2005.

The European Commission[9] has recognised the emergence of new quality assurance agencies and networks as the most significant development in the European landscape. Quality assurance agencies have been set up in almost all countries of the EHEA, although quite heterogeneous in terms of size, scope, statute, focus and international capacity. It has been noted that, apart from a few exceptions, their remit is limited to their country (and sometimes their region) and only a very small number are active outside their own territory. Most agencies focus on programme evaluations, but a growing number are being involved in institutional accreditations or audits.

The first three quality assurance agencies were included in the new European Quality Assurance Register for Higher Education (EQAR) on, 5 December 2008.[10]

In 2011, 24 quality assurance agencies were registered with EQAR. These were coming from: Austria (1); Belgium (2); Bulgaria (1); Denmark (1); Finland (1); France (1); Germany (7); Ireland (2); Netherlands (1); Poland (1); Romania (1); and Spain (5)[11].

The 46 signatory countries of the Bologna Process convened again in Leuven/Louvain-la-Neuve in 2009. The *Leuven Communiqué*[12] identifies the decade up to 2020 as a period in which the European Higher

8 EQAR, Press Release, Europe launches Quality Assurance Register for Higher Education, (http://www.eua.be/fileadmin/user_upload/files/Press/EQARlaunchpr-FINAL.pdf)

9 Commission of European Communities, 2009, Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of Regions: Report on progress in quality assurance in higher education, Brussels, 21.9.2009 COM(2009) 487 final.

10 http://www.eqar.eu/

11 http://www.eqar.eu/register/

12 Ministers of Higher Education, 2010, The Bologna Process 2020 -The European Higher Education Area in the new decade: Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

Education Area has a vital contribution in forming a Europe of knowledge that is highly creative and innovative. Europe is facing many challenges amongst which that of: an ageing society; globalisation; accelerated technological developments; as well as the current global financial crisis. Within this context, the Communiqué outlines the need for more integration between education and research at all levels. The document also identifies Higher Education as a public responsibility that should be responsive to the wider needs of society, including: preparing students for life as active citizens in a democratic society; preparing students for their future careers and enabling their personal development; as well as maintaining a broad, advanced knowledge base and stimulating research and innovation.

The main priorities identified for higher education for 2010-2020, include:

- the need to ensure equitable access to all, enhancing the potential of underrepresented groups and providing good conditions for completion of studies;
- widening participation through lifelong learning, particularly through the development of National Qualifications Frameworks;
- improving the provision, accessibility and quality of agencies and employment related students and alumni guidance services;
- further focus on student-centred learning through a learning outcomes approach;
- furthering international openness by engaging in global collaboration for sustainable development;
- striving for 20% mobility rates for graduates in the European Higher Education Area by 2020; and
- providing attractive working conditions and career paths to draw highly qualified teachers and researchers to Higher Education.

The Communiqué specifies that the Bologna Process should be co-chaired by the country holding the EU presidency (rotating every six months) and a non-EU country. The BFUG was assigned to prepare a work plan till 2012. The BFUG was asked to:

- define the indicators used for measuring and monitoring mobility and the social dimension in conjunction with the data collection;
- consider how balanced mobility could be achieved within the EHEA;
- monitor the development of the transparency mechanisms and report back at the 2012 ministerial conference;
- set up a network, making optimal use of existing structures, for better information and promotion of the Bologna Process outside the EHEA;
- follow-up on the recommendations analysing the national action plans on recognition.

The Ministers met again on the 11-12 March 2010 to launch the European Higher Education Area (EHEA)[13]. They acknowledged the fact that Higher Education Institutions, staff and students were increasingly identifying with the goals of the Bologna Process and that action lines such as degree and curriculum reform, quality assurance, recognition, mobility and the social dimension were being implemented to varying stages. They emphasized the need to foster student-centred learning as a way of empowering the learner in all forms of education and providing the best solution for sustainable and flexible learning paths. There was the reiteration that Higher Education is a public responsibility. The Bologna Follow-up Group was given the task to propose measures to facilitate the proper and full implementation of the agreed Bologna principles and action lines across the European Higher Education Area, especially at the national and institutional levels, by developing additional working methods, such as peer learning, study visits and other information sharing activities.

13 Ministers for Higher Education, 2010, Budapest-Vienna Declaration on the European Higher Education Area,, March 12, 2010.

1.2 Stock-taking Developments of the Bologna Process across Signatory Countries

Developments in the Bologna Process across the signatory countries were recorded in the *2007 Stock-taking Report*[14] and more recent developments were outlined in the *2009 Stock-Taking Report*[15]. A summary from the 2007 report identified three main findings:

1. There has been good progress in the Bologna Process since Bergen.
2. The outlook for achieving the goals of the Bologna Process by 2010 was good, but there were still some challenges to be faced.
3. Stock-taking worked well as an integral part of the Bologna Process strategy.

The 2007 stock-taking exercise showed that there had been good progress in the Bologna Process since Bergen. The Bologna Process had driven the process of Higher Education reform at national level. The sharing of expertise contributed to building capacity at both institutional and national levels, resulting in measurable progress across all participating countries.

In 2007, the three-cycle degree system was at an advanced stage of implementation across the participating countries. Access from one cycle to the next had improved, and there was also a trend towards providing structured doctoral programmes. Work had started on implementing national frameworks for qualifications which were compatible with the overarching framework for qualifications in the European Higher Education Area (EHEA).

Implementation of the Standards and Guidelines for Quality Assurance in the European Higher Education Area, adopted in Bergen, had also started to be implemented on a widespread basis whilst student involvement in quality assurance had also grown significantly since 2005.

There was good progress towards incorporating the principles of the Lisbon Recognition Convention in national legislation and institutional practice. However, not all countries had ratified the Convention yet. Countries had developed national action plans to improve the quality of their recognition processes. There was potential for a significant increase in the number of joint degrees awarded in two or more countries. Legal barriers to the recognition of joint degrees had largely been removed. Higher Education institutions had begun to recognise prior learning (including non-formal and informal learning) for access to Higher Education programmes and qualifications. However the end of the tunnel was still far ahead.

Many countries had been strengthening the links between Higher Education and research sectors. Some countries had also extensive plans to increase the numbers of doctoral graduates taking up research careers.

At this stage, two themes linking all action lines were found, namely: a focus on *learners*; and a focus on *learning outcomes*. It was agreed that all countries needed to use learning outcomes as the basis for their National Qualifications Frameworks, systems for credit transfer and accumulation, the diploma supplement, recognition of prior learning and Quality Assurance.

It was argued that stock-taking within the Bologna Process works best when it is an integral part of a goal-driven development strategy that included five "steps to success". These were:

14 Bologna Follow-up Group Stocktaking Working Group 2005-2007, Bologna Process Stocktaking Report 2007, Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007.

15 Rauhvargers A., Deane C. & Pauwels W., (2009), Bologna Process Stocktaking Report 2009, Report from working groups appointed by the Bologna Follow-up Group to the Ministerial Conference in Leuven/Louvain-la-Neuve.

1. Agree the policy goals, linking them to a vision for the future that is shared by all participating countries;
2. Set targets to be achieved within a certain timeframe (make sure they are Specific, Measurable, Achievable, Relevant and Timed: SMART);
3. Take action at national level and collectively provide relevant support, share good practice, encourage peer collaboration;
4. Review progress individually: self-evaluation using agreed criteria (scorecard) complemented by qualitative reporting;
5. Evaluate achievement collectively (stock-taking).

In the data collection process for the *2009 Stock-Taking Report*[16], criteria for the indicators were substantially more demanding. The overall conclusions tackled a number of aspects of the reforms. These were:

Degree system

- The first and second cycle degree system across all Higher Education in the Bologna Area is reported to be only a question of time; even if in some countries the proportion of students studying in the Bologna three-cycle system is still low. Moreover in some countries certain regulated professions and some specific disciplines are not yet included in the two–cycle system.
- There are no obstacles to access to the next cycle even if in a number of countries students have to meet additional requirements such as examinations, additional courses or work experience to gain admission.
- The implementation of the third cycle is progressing and is being included in the National Qualifications Frameworks; ECTS is being widely used, and the pattern of at least three-year doctoral studies is strengthening. However, the need to provide doctoral students with transferable skills for employment, whether in or outside academia, has not been fully understood;
- There is no single model for the status of doctoral candidates: they may be considered students, early stage researchers or both;
- Employability of graduates, especially those with bachelor degrees, varies significantly across countries, and their acceptability in the labour market depends as much on the established custom and practice of different countries as on the effective implementation of the Bologna reforms.

Qualifications Frameworks and Lifelong Learning

- Six countries have completed the self-certification process, but the implementation of NQFs for Higher Education by 2010 was too ambitious;
- With the exception of a few countries, there is little or no recognition of learning undertaken outside the formal education system. This requires first a change of culture in HEIs, and the link between credits and learning outcomes;
- Few countries have made an explicit link between flexible learning and their National Qualifications Frameworks;
- There is still not enough integration at national level between the qualifications frameworks, learning outcomes and ECTS. The fully-fledged introduction of a lifelong learning culture based on the full implementation of a learning outcomes approach – across the Bologna Area - still needs a lot of effort, and it has not been completed by 2010.

16 Rauhvargers A., Deane C. & Pauwels W., (2009), Bologna Process Stocktaking Report 2009, Report from working groups appointed by the Bologna Follow-up Group to the Ministerial Conference in Leuven/Louvain-la-Neuve.

Quality Assurance

- All countries have introduced external Quality Assurance (QA) systems including self-assessment and external review; nearly all publish assessment results and carry out follow-up measures. Some countries with small Higher Education systems do not have a national QA agency but organise external QA;
- In most countries HEIs have established internal QA procedures, although some are much stronger than others;
- Student participation in QA has progressed since 2007; however students often participate in reviews only as observers, they are not always involved in preparing self-assessment reports and they are seldom involved in follow-up measures;
- There is greater international involvement in external review teams. Some participating countries are members of ENQA or other international QA networks; however a large number of countries are still not full members of ENQA.

Recognition

- The Diploma Supplement (DS) is being implemented but not as widely as would have been expected, and only just over half of the countries had managed to implement it fully by 2009;
- There is compliance of national legislation with the Lisbon Recognition Convention, but more work is needed for the recognition of qualifications within the Bologna Area;
- ECTS is widely used for credit transfer and accumulation but in a number of countries ECTS is still not fully implemented.

Joint degrees

- Three-quarters of the countries have amended their legislation to allow awarding of joint degrees which are being established in all areas of study. However, 50% of the countries estimate that only between 1% and 25% of HEIs are involved in joint degree cooperation.

Social dimension

- Only a minority of countries have set up monitoring systems to measure how student population reflects population diversity;
- National approaches to the social dimension are not yet successfully integrated with qualifications frameworks, strategies for lifelong learning, recognition of prior learning, flexible learning paths and support for mobility.
- There is insufficient data about the social dimension and mobility.

Global dimension

- The Bologna Process has enhanced cooperation between countries, organisations and Higher Education Institutions inside and outside Europe. However, very few seem to focus on promoting the Bologna Area.

An *independent assessment*[17] grading the achievements of the Bologna Process has also been carried out. The conclusion revealed that, in 2010, higher education in the 46 signatory countries was substantially different from what it was in 1999. Legislation and national regulations have been implemented in most countries. The impact of these changes were however, less evident within Higher Education Institutions and study programmes. Most of the 46 countries have also adopted new higher education legislation to introduce and regulate elements of the Bologna Process. Many have also allocated additional funds for the implementation of new *Bologna* policies. All *Bologna* countries, with the exception of two, have

17 Centre for Higher Education Policy Studies, International Centre for Higher Education Research Krassel, ECO-TEC, 2010, The Bologna Process Independent Assessment, The first decade of working on the European Higher Education Area, Volume 1: Detailed assessment report.

signed or ratified the Lisbon Recognition Convention (LRC); 5 have signed and ratified the LRC but their legislation is not yet in compliance with the LRC. On the contrary, 39 countries have signed and ratified the LRC and their legislation complies with the provisions of the LRC.

While some countries have shown considerable progress in implementation, others still have to start working on some aspects in particular. This has been leading to varying levels of implementation and commitment across countries. Different countries are facing different challenges, ranging from inefficiencies to different management to governance arrangements. In addition, different countries interpreted elements of the Bologna reform agenda differently.

All countries have adopted two-/three-cycle degree systems, with a range of 180–240 credits (in ECTS) for the first cycle and 60–120 credits for the second cycle. This goal has thus been achieved. The combination '180+120' credits (or in years of full-time study: '3+2') emerged as the most prominent model in Europe. However, there is flexibility to accommodate variations of the model. Nonetheless, the percentage of learners studying in two-cycle programmes was below 50% in six systems. Doctoral degrees have become more structured recently. A nominal length of 3-4 years is the most common duration throughout the countries in the EHEA. In 30 out of 46 countries, the Diploma Supplement is issued. Moreover, the DS is issued automatically free of charge in most Higher Education Institutions. This issue needs to be addressed in both the other 16 countries and in the remaining Higher Education Institutions in the 30 countries, which already issue the DS.

All Higher Education systems either already use the European Credit Transfer and Accumulation System (ECTS), or are in transition towards achieving it, or use ECTS-compatible systems. This goal has been substantially achieved at the level of regulation, but the extent to which the ECTS is used in institutions and programmes needs to be improved. Only 12 Higher Education systems have been allocating credits to student workload and learning outcomes. Curriculum reform is also another issue which has been partly achieved and which entails further development.

While in all Bologna countries, many learners have the option to continue second or third cycle studies in different institutions within the same country or in other Bologna countries, areas such as recognition and student support need to be developed further. Student mobility within the Bologna area did not increase substantially in the period up to 2007, and an east-to-west imbalance of student mobility within Europe still exists.

Mobility from other parts of the world towards the Bologna has increased substantially, attracting 30% of the world's foreign learners in 2007. Yet, the Bologna area is still a work in progress and is still not well renowned as a student destination. USA remains the most sought destination, attracting the top tier of learners (e.g. from China). Cooperation between Higher Education Institutions from Bologna countries and counterparts abroad (e.g. Africa, Latin America) has also increased.

The European Standards and Guidelines (ESG) for quality assurance have been adopted and the European Quality Assurance Register (EQAR) has been established and is now operative. The perceived diversity between countries in the quality of education being delivered needs to be reduced to achieve a coherent higher education system in the EHEA. An overarching framework for qualifications of the European Higher Education Area (QF/EHEA) has been adopted (2005) and eight Higher Education systems have self-certified National Qualifications Frameworks whilst the other countries plan to reach this target by 2012.

In 39 Higher Education systems, underrepresented groups feature in the institutions' student bodies. These underrepresented students tend to come from low socio-economic backgrounds, and are also

likely to enter Higher Education through non-traditional educational routes. In almost all countries, female learners are underrepresented particularly in fields such as science and technology as well as in the second and third cycles of study.

Policies suitable to widen participation and successful completion of studies such as recognition of prior learning (RPL), flexible study modes, counselling for learners and financial aid are available at different stages and in a variety of countries.

1.3 2010 and Beyond

The year 2010 had been targeted as the year for the official launch of the European Higher Education Area of the Bologna Process, which was envisaged to continue developing beyond 2010. In 2005, the targets set for 2010 started being discussed. The potential achievements of the Bologna Process were to lead the European Higher Education Area to be founded on the following structural elements:

- Within the overarching framework for the EHEA, all participating countries will have a national framework of qualifications based on three cycles in Higher Education, where the levels have a double function: to prepare the student for the labour market and for further competence building. Each level builds on the preceding level, and the qualification obtained will give access to higher levels.
- All participating countries will have national quality assurance arrangements implementing an agreed set of standards and guidelines for the EHEA.
- All Higher Education institutions in participating countries will recognise degrees and periods of studies according to the Lisbon Recognition Convention.[18]

In the London Communiqué, the Ministers of Higher Education asked the BFUG to reflect and report back on how the EHEA might develop after 2010. A report[19] produced in July 2008 by the BFUG provides an insight of the challenges and direction of the Bologna Process. This report highlights how not all participating countries will have reached all the objectives of the Bologna Process by 2010. This issue made it necessary for the Bologna Process to continue after 2010 in order to complete its implementation. Distinction was made between action lines and policy areas which needed to be tackled.

The action lines identified in the report[20] include:

- **The degree structure and qualifications frameworks:** While much of the structural reform is in place in many of the signatory countries, the key challenge is to move from structure to practice. This requires further investment in resources to improve understanding of learning outcomes and development of curricula based on outcomes. This also implies that teaching will change and this has organisational implications;
- **Quality Assurance:** The European Quality Assurance Register (EQAR) is operational and national quality assurance agencies have started to implement the European Standards and Guidelines. This has led to a proliferation of quality assurance and accreditation agencies bringing about the danger of bureaucratization when the focus should still remain on the quality of teaching, learning and research;
- **Recognition:** Many countries have recognised the Lisbon Recognition Convention. However, it is highlighted that the key point is for more transparency on how the Lisbon Convention is implemented, the processes involved and the criteria for decisions. The BFUG state that there is no need for new measures or rules, but for a better understanding and implementation of the action lines at institutional level.

18 Per Nyborg, Head, Bologna Secretariat, A Vision for 2010 and Beyond, ESIB seminar: Bologna, Bergen and beyond, Bergen 11-13 May 2005.
19 BFUG (FR),14_9, 2008, draft Bologna beyond 2010 report.
20 BFUG (FR),14_9, 2008, draft Bologna beyond 2010 report.

The policies to take into consideration refer to the social dimension, employability and the global dimension of the Bologna Process. These aspects refer to several dimensions which need to be tackled to enhance the implementation process, mainly:

- **The Social Dimension -** The social dimension refers to the provision of equitable access into, progress and completion of Higher Education. In a knowledge-based society Higher Education is important both to the development of successful economies as well as to provide opportunities for all individuals to participate in and benefit from a successful economy. Equity and social justice make Higher Education the drivers for social cohesion and social citizenship as they act as tools for the redistribution of wealth through investing in social mobility and the young generation. In order to be equitable and to widen participation in Higher Education there is a need for more flexible pathways.

- **Employability -** Employability involves teaching and learning of generic skills and competences, communication skills as well as the capacity to reason at a level of abstraction. There is a need to recognise the full potential of the Bachelor's degree where the degree holder must be capable of summoning knowledge and skills that make it possible to adapt to manifold situations. The BFUG highlights how degrees should have curricula which cater for needs in tomorrow's economy. Thus there is also need to promote the degree structure among small and medium sized enterprises.

- **Lifelong Learning** - Lifelong learning is concerned with moving up the qualifications framework and improving knowledge, skills and competences. It also has a social function as it empowers people, promotes social cohesion, as well as contributes to reducing policy. One of the fundamental issues faced is how to make Higher Education better tailored for lifelong learning with multiple sources of financing.

- **Attractiveness of European Higher Education -** The EHEA is to be an attractive place to study and an attractive labour market for academics while maintaining the rich and diverse cultural heritage that European Universities possess. The EHEA should aim to compete with the US and a number of the Far Eastern countries in investments and innovation. This requires the provision of information targeted at non-EHEA countries.

- **Mobility** - Mobility remains one of the crucial aspects of the EHEA. This implies that there needs to be further efforts to make teaching and studying abroad more meaningful. This is particularly relevant as shorter degree courses are viewed as making mobility and periods abroad more difficult.

All these aspects lead to the importance of curriculum development based on learning outcomes, lifelong learning provision, and study programmes which enable mobility. This calls for the development of subject specific descriptors for knowledge, skills and competences. The BFUG report[21] goes on to consider the long-term challenges, and identified five main challenges which would need to be faced in the future whilst keeping in mind the 2020 scenario. These challenges include:

- **Global competitiveness -** global competitiveness means borderless Higher Education. Higher Education will have to face competition on both a national and international level with the emergence of virtual learning. There will also be a greater combination of learners from different cultures and across borders. Academic capitalism might make Universities behave

21 BFUG (FR),14_9, 2008, draft Bologna beyond 2010 report.

like enterprises. Higher Education would also need to cater for global needs through greater interdisciplinary action. It also requires that Higher Education has to base teaching on the latest research findings, contribute to produce creative graduates, as well as take into consideration international regulation of intellectual property, contract research, researcher rights and professional status. Higher Education will also need to develop intercultural awareness and help students to develop knowledge, skills and be critical of their own assumptions in order to be able to engage open-mindedly with different cultures;

- **Demographic changes –** within Higher Education, access needs to be widened and different groups of learners need to be catered for in order to comply with the needs that an increasingly ageing society brings with it. This implies learning to implement student-centred learning and flexible pathways in relation to the qualifications frameworks and to the recognition of prior learning. Mobility also needs to be revised within Higher Education since it needs to foster the dimension of an ageing population;

- **Roles and responsibilities –** the traditional role of Higher Education has historically been related to a national level and a large number of students opt to work as civil servants. However, the greater internationalisation of Higher Education has been leading to a different role for Universities. The state is becoming more of a regulator leading to a redefinition of roles and responsibilities with respect to: quality development and assurance, funding framework, governance, institutional autonomy and accountability, diversity of missions and institutions, and the social dimension;

- **Institutional diversity -** internationalisation will surely lead to competition and establishment of different ratings for Universities. In this context it is important that diversification is made transparent through better tools ensuring that periods of study are readable, understandable and lead to multiple reputation mechanisms;

- **Funding:** funding of Higher Education institutions in many countries occurs through the allocation of grants to Higher Education providers. These have already been extended through tuition fees. Funding Universities shall remain a debate and there shall be an evermore growing need for discussion in relation to gathering different forms of funding, whilst reducing state funding and maintaining Higher Education as a public benefit.

The BFUG report concludes that a master plan for the future of the Bologna Process would require, in the short-term, to implement the new degree structure and to endorse it by establishing regulated professions, developing and implementing qualifications frameworks based on learning outcomes, involving stakeholders in the reforms process and ensuring quality. Mobility remains of great importance with curricula designed to better suit mobility as well as legal frameworks which promote staff mobility. It has also been recommended that a mobility code be drafted and data is collected to monitor the internationalisation of Higher Education as a benchmarking exercise.

The BFUG also argues that the demographic challenges and global competitiveness require a coordinated European response. With respect to the demographic issue, Higher Education providers need to meet the challenges of promoting lifelong learning, rethink international mobility as well as promote social cohesion. They also need to encourage creativity and develop a new paradigm of learning outcomes. Global competitiveness will lead to establishing a balance between competition and collaboration. This also requires the continual assurance of promoting transparency within the EHEA. All these challenges will lead to the redefinition of the roles and responsibilities of governments and Higher Education providers.

The independent evaluation carried out more recently has highlighted the importance of focusing on greater involvement of staff within higher education institutions and other non-state actors, in the second decade of operation of the Bologna Process. Attention needs to be placed on the compatibility of the education outcomes with National Qualifications Frameworks (NQFs). The common goals of the EHEA should be made clearer to teachers and learners, showing an advantage for both teaching and learning. A challenge for the Bologna Process is thus to keep up the political momentum and the interest of political leadership in the reform processes. This is needed to minimise the risk of the process becoming solely administrative without having much impact on the reality of Higher Education.

1.4 Conclusion

The Bologna Process has grown in the number of countries signing up, as well as in the different areas of reform identified as necessary for the establishment of the European Higher Education Area (EHEA). Some of these reforms have been implemented on a large scale such as the ECTS system. Other areas, however still pose challenges, and require further work in achieving the targets set for EU 2020 and beyond.

The Impact of the Bologna Process on Higher Education Institutions in Malta

Chapter 2:
Higher Education in Malta and the Bologna Process – an update

2. 0 Introduction

The Bologna Process has influenced the evolution of Higher Education in Malta. The main important developments had an impact primarily on the University of Malta, as the major Higher Education provider in the country. Since the beginning of the Bologna Process in 1999, Malta has experienced structural changes at the University of Malta such as the implementation of the ECTS system and the development of the Diploma Supplement. There have been also changes on a national level such as the setting up of the National Commission for Higher Education (NCHE) and the Malta Qualifications Council (MQC). Other players, such as MCAST and ITS, are now also involved in the Bologna Process as they offer courses at MQF/NQF levels 5. Moreover, in 2009, MCAST also started offering degree courses at MQF/NQF level 6.

This chapter aims to chart the developments in Higher Education in Malta since the beginning of the Bologna Process. The main documents reviewed include the National stock-taking reports that were prepared by Malta in 2005, 2007 and 2009 to report the developments to the BFUG group involved in the stock-taking exercise. The stock-taking reports published by the BFUG group were in preparation for the Ministers' conferences in 2005, 2007 and 2009. These have also been reviewed to indicate the degree of reform in comparison to the other signatory countries.

2.1 Developments up to the first stock-taking exercise in 2005

Developments with respect to the implementation of the Bologna Process in Malta up to 2005 have been documented in the National report prepared for the Ministerial conference held in 2005[22]. Historically, since the University of Malta followed the British model for Higher Education, it had been offering the two-cycle system before the start of the Bologna Process. This already existing structure facilitated the implementation of the Bologna Process. Consequently what was required was mainly the streamlining of already existing courses to the Bologna requirements. By 2005, the University of Malta had already carried out the implementation of the ECTS system across undergraduate courses except in the case of Medicine and Dentistry. Many of the first cycle courses were also run with harmonised regulations. The University of Malta had also already started working towards issuing the Diploma Supplement to its graduates. The University of Malta had set up a committee to develop the format and information to be included in the Diploma Supplement. It had also worked towards strengthening its internal quality assurance system through the Quality Assurance Committee.

Mobility of staff and students in Higher Education occurred mainly through the ERASMUS programme which was strongly supported within the University of Malta with as many as 200 agreements. The University of Malta also has other agreements with non-EU Universities such as Australia, Canada, Japan, and the US. Initiatives to promote mobility involved the opportunity to take soft loans from local banks. In the case of incoming students, the University of Malta started offering courses in basic Maltese. Government also passed legislation to reduce difficulties in issuing visas and allowing students to work part-time during their studies. Mobility of staff and students, however, was mainly for short-terms.

Three legal notices were also promulgated to amend the Mutual Recognition of Qualifications Act (Act No. XVIII of 2002)[23]. These included an amendment to:

22 Bologna Process National Report: Malta, Jan 13, 2005, http://www.bologna-bergen2005.no/
23 Government of Malta, Mutual Recognition of Qualifications Act (Act NoXVIII of 2002).

- the Mutual Recognition of Professional Education and Training Regulations;
- the Mutual Recognition of Professional Activities; and
- the Malta Qualifications Recognition Information and the Mutual Recognition of Qualifications Board Regulations.

The Act catered for the setting up of the Malta Qualifications Recognition Information Centre (MQRIC) which has the function of evaluating diplomas, providing assistance in the comparative analysis of diplomas, collecting and disseminating information about professional and vocational qualifications, promoting the recognition of Maltese qualifications abroad, facilitating mobility of professionals, and promoting transparency of qualifications. Annex VII includes the Mutual Recognition of Professional Qualifications[24] and lists the possible qualifications within the European Union that are recognised for specified professions. The structure of the University of Malta enabled the participation of students at the different structural levels within the University as required by the Bologna Process. In fact, Boards of Studies, Faculty Boards, Senate and Council already included student representatives as well as government representatives and other key players.

In promoting the social dimension, the Government of Malta has kept University studies provision at first-cycle level free of charge whilst also giving students a stipend to help with relevant expenses. In addition, the University of Malta also provides a child-minding service which is at the students' and staff's disposal.

With respect to the recognition of informal and non-formal learning, the University of Malta already had a maturity clause which allowed anybody over the age of 23 years to apply for a number of first-cycle courses and to be admitted on the basis of their experience and informal learning.

In terms of Internationalisation of Higher Education, the University of Malta was already a member of the Association of Commonwealth Universities, the Utrecht Network, the Council to International Educational Exchange (CIEE), NAFSA, the International Student Exchange Programme (ISEP), as well as the Santander Network and the Compostela Group. The University had also developed an International market for non-EU students with 594 international students from the registered 8725.

2.2 Malta's position after the first stock-taking exercise in 2005

At the Berlin Ministerial Meeting in September 2003, Ministers responsible for Higher Education entrusted the BFUG to undertake a stock-taking exercise identifying the progress made in three priority action lines – quality assurance, the two-cycle degree system and recognition of degrees and periods of study. In March 2004, the BFUG established a working group to carry out the stock-taking exercise, the report[25] of which was published in May 2005 for the Ministerial meeting held in Bergen.

This stock-taking exercise gave a snapshot of the work done by Malta up to 2005. This report presented the Bologna Scorecard, developed to give an overview of progress on the three priority action lines. The scorecard was based on objective criteria and benchmarks, and it showed collective achievement of the targets set by the Ministers in Berlin.

The working group reviewed the national reports submitted for each of the three action lines, and elaborated key criteria for each one. Each criterion was further expanded on the basis of five benchmarks, which also served to measure the extent of progress achieved. These were subsequently colour-coded, as shown below.

24 Government of Malta, Mutual Recognition of Professional Qualifications, 2006.
25 Bologna Process Stocktaking Report from a working group appointed by the Bologna Follow-up Group to the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

Green	Excellent performance
Light Green	Very good performance
Yellow	Good performance
Orange	Some progress has been made
Red	Little progress has been made yet

Fig. 2.1: Colour Codes for Progress Achieved

The scoreboard showed that Malta had done a lot of work and advanced particularly with respect to the two-cycle system where it obtained dark green (excellent) for all the four sub-criteria within this action line. Performance in the other two action lines was less. In quality assurance, and international participation development was considered to be good. Very good performance was noted in the areas of evaluation systems, as well as the participation of students. An overall light green evaluation was obtained for quality assurance. In recognition, the implementation of ECTS was rated as excellent. The Diploma Supplement was rated as good due to the planning being done by the University of Malta. Some progress was noted with respect to the Lisbon Recognition Convention. The overall score for recognition was yellow – good.

BOLOGNA SCORECARD MALTA

QUALITY ASSURANCE	
1. Stage of development of quality assurance system	
2. Key elements of evaluation systems	
3. Level of participation of students	
4. Level of international participation, co-operation and networking	
TWO-CYCLE DEGREE SYSTEMS	
5. Stage of implementation of two-cycle system	
6. Level of student enrolment in two-cycle system	
7. Access from first cycle to second cycle	
RECOGNITION OF DEGREES AND PERIODS OF STUDY	
8. Stage of implementation of Diploma Supplement	
9. Ratification of Lisbon Recognition Convention	
10. Stage of implementation of ECTS	
TOTAL	

Fig. 2.2: Bologna Scoreboard Summary (2005) for Malta[26]

2.3 Developments up to the National Report in 2007

A second National report was submitted in March 2007 as part of the stock-taking exercise to be prepared for the May 2007 Ministerial meeting which was held in London. This report[27] included the main developments with respect to the Bologna Process since 2005.

26 Bologna Process Stocktaking Report from a working group appointed by the Bologna Follow-up Group to the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.
27 Bologna Process National Report: Malta, March 2007.

The main achievements identified since Bergen included the establishment of the National Commission for Higher Education (NCHE) and the Malta Qualifications Council (MQC). There was also the intention of the Malta College for Arts, Science and Technology (MCAST) to start offering first-cycle degrees. The main legislative advancement was the Education Act (2006) which contains the regulations governing HEIs and includes chapters for the University of Malta, MCAST, ITS (Institute of Tourism Studies) and the National Commission for Higher Education (NCHE). Private institutions are also regulated in the same Act.

In these two years the National Qualifications Framework (NQF) was launched on 1st November followed by a nationwide consultation period of six months, after which the Malta Qualifications Framework was officially set up in June 2007. The NQF was reflected in national legislation – Legal Notice 347 – Malta Qualifications Council Regulations of 2005. The MQC was in the process of establishing national outcomes-based descriptors of qualifications in vocational education and training, as well as an updated version of the level-descriptors of the NQF.

Regarding quality assurance, the National Commission for Higher Education (NCHE) had started to work towards establishing a National Quality Assurance System for Higher Education in line with the Standards and Guidelines for QA as established by the EHEA. In 2007 the MQC also published a working document for a Quality Assurance system for Vocational Education and Training Programmes that fall within the Higher Education sector. At the same time, both the University of Malta and the Institute of Tourism Studies (ITS) had internal quality assurance systems in place while MCAST was working towards a QA policy. Students were reported to have an active role in the general academic, cultural and social affairs of their institutions, and they often expressed their opinion in public as well as drew up reports on issues concerning changes and developments within Higher Education. It was reported that there was also international monitoring in all programmes of studies at the University of Malta, MCAST, and ITS. The University of Malta has been an active member of ENQA while the MQC has been Malta's representative on ENQA-VET since December 2006.

A pilot project at the University of Malta resulted in the first Diploma Supplement being issued in 2006 to a few students. This Diploma Supplement was in full conformity with the EU/CoE/UNESCO Diploma Supplement format.

Malta Ratified the Lisbon Convention on 15th November 2005 when it was transposed into Maltese legislation through Legal Notice 280/2006. With respect to the Supplementary documents, all texts complied except for the code of Good Practice in the Provision of Trans-National Education, the recommendation on the Recognition of Joint Degrees and the Explanatory Memorandum to the Recommendation on the Recognition of Joint degrees. Recognition of informal and non-formal learning in 2007 was on the MQC's agenda.

As a matter of fact, in June 2008, MQC presented a Draft Policy document on the Validation of Informal and non-Formal Learning to stakeholders. The NQF created pathways for flexible learning in Higher Education and vocational education and was based on exit points while entry points were to be set by individual training providers. HEIs have been also setting up guidance and counselling services. Furthermore the then Ministry of Education, Youth and Employment started offering loans with substantially subsidised rates as well as set up a Malta Government Scholarship Scheme for students with a total annual grant of 430,000 Euro.

2.4 Malta's position after the stock-taking exercise in 2007

When the Stocktaking Working Group presented its report to the Ministerial meeting in Bergen in 2005, Ministers accepted the recommendation that the stock-taking exercise should continue. They also asked that a further report should be prepared for their meeting in London in May 2007. This report[28] was designed to check the progress that participating countries had made on the aspects of the Bologna Process included in the Bergen Communiqué.

28 Bologna Process Stocktaking Report 2007 Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007.

The stock-taking exercise[29] included measures on 12 different indicators, some of which were the same as those presented in 2005 whist others were new to the 2007 exercise.

Indicator 1 in 2007 (same as indicator 6 in 2005) measured the level of student enrolment in the two-cycle system. There had been good progress in implementing the first and second cycle since 2005, even though the indicator was more demanding in 2007. Most countries had introduced the first and second cycle of the degree system gradually and progress was steady. There were only four countries that had completed legislation but had not yet implemented it. There was good evidence to conclude that this action line would be fully implemented by 2010.

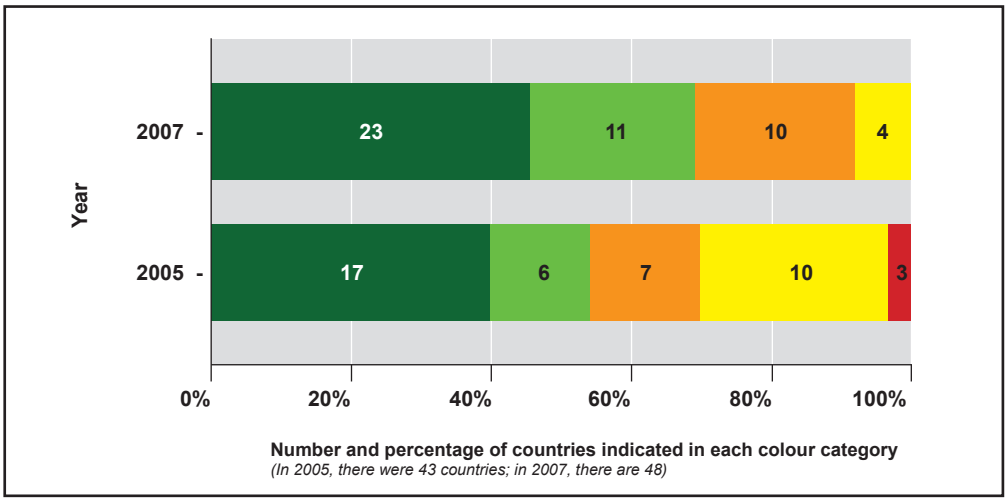


Fig. 2.3: Indicator 1 - Stage of Implementation of the First and Second Cycle Comparison 2005-2007

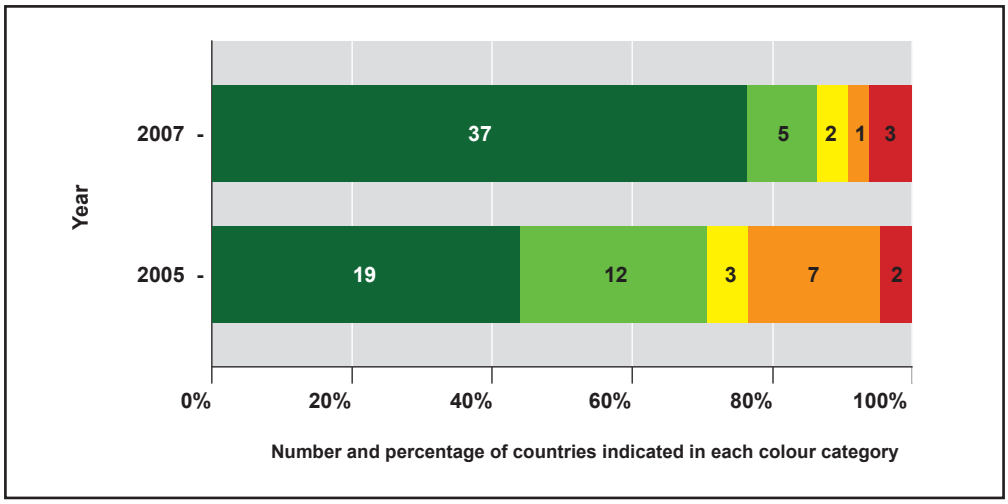


Fig. 2.4: Indicator 2 - Access to the Next Cycle Comparison 2005-2007

Indicator 2 related to access, had more demanding criteria in 2007 than in 2005. Good progress regarding access to the next cycle had been registered since 2005, with many of the countries managing to improve substantially. This was evident from the greater number of countries achieving a dark green rating.

29 This section of the report is a summary of the document Bologna Process Stocktaking Report 2007 Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007.

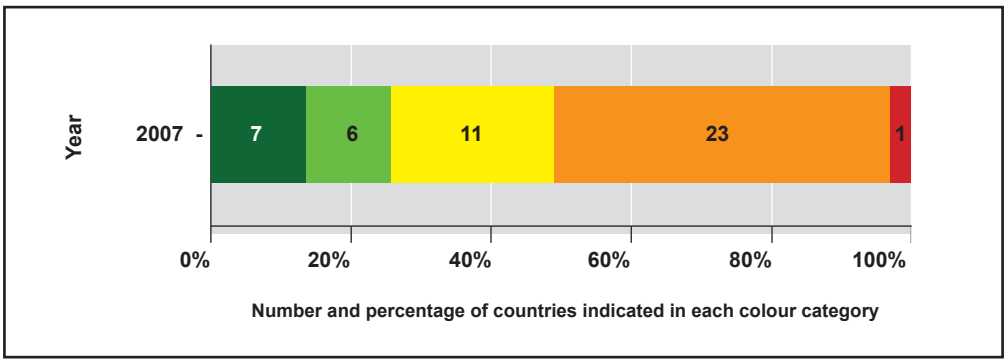


Fig. 2.5: Indicator 3 - Implementation of National Qualifications Framework Progress up to 2007

Indicator 3 was a new indicator. Most of the countries that were rated in the green category had started developing their National Qualifications Framework before 2005. Some countries had taken ten to fifteen years to complete this development process and implement their framework fully. There was concern amongst some of the countries that it could be difficult to have national frameworks in place by 2010. While the introduction of the principles of the framework in legislation could be quick, the full implementation of the framework could take years. Some countries and institutions confused the framework for the EHEA adopted in Bergen and the EQF adopted by the European Parliament in April 2008.

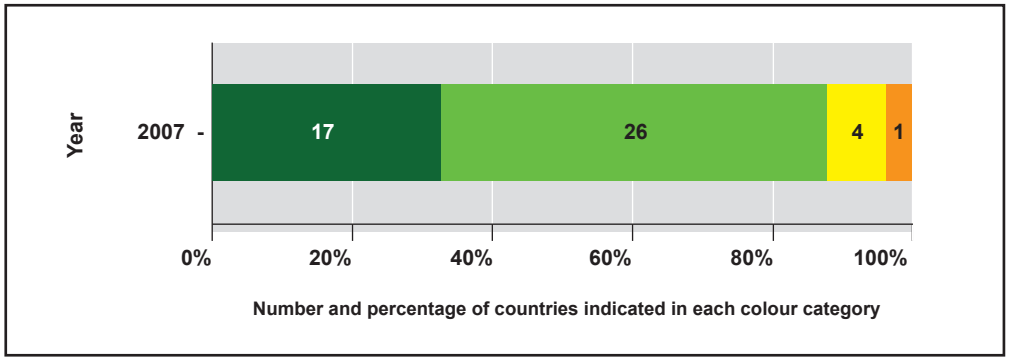


Fig. 2.6: Indicator 4 - National Implementation of *Standards and Guidelines for Quality Assurance in the EHEA* Progress up to 2007

Close to one-third of the countries had developed a national quality assurance system in line with the *Standards and Guidelines for Quality Assurance in the EHEA* which was already fully operational (*green*), while other countries (*light green, yellow* and *orange*) had started work on aligning their quality assurance systems with the ESG. The indicator showed that in many countries there was still a lot to be done and many gaps still needed to be filled in this area.

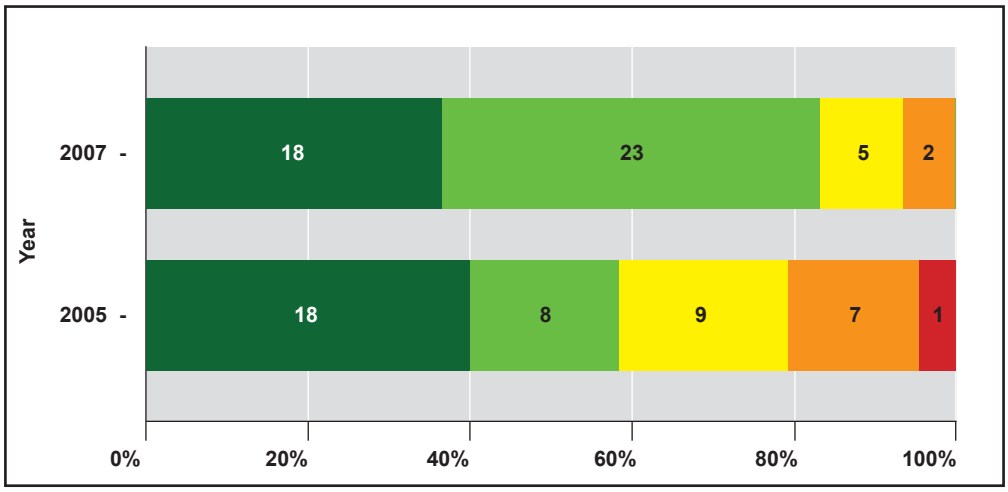


Fig. 2.7: Indicator 5 - Stage of Development of External Quality Assurance Systems Comparison 2005-2007

This indicator had changed since 2005, as the criteria became more stringent. However, there was still significant progress in establishing systems for external evaluation, with many more countries now in the combined green/light green categories than in 2005.

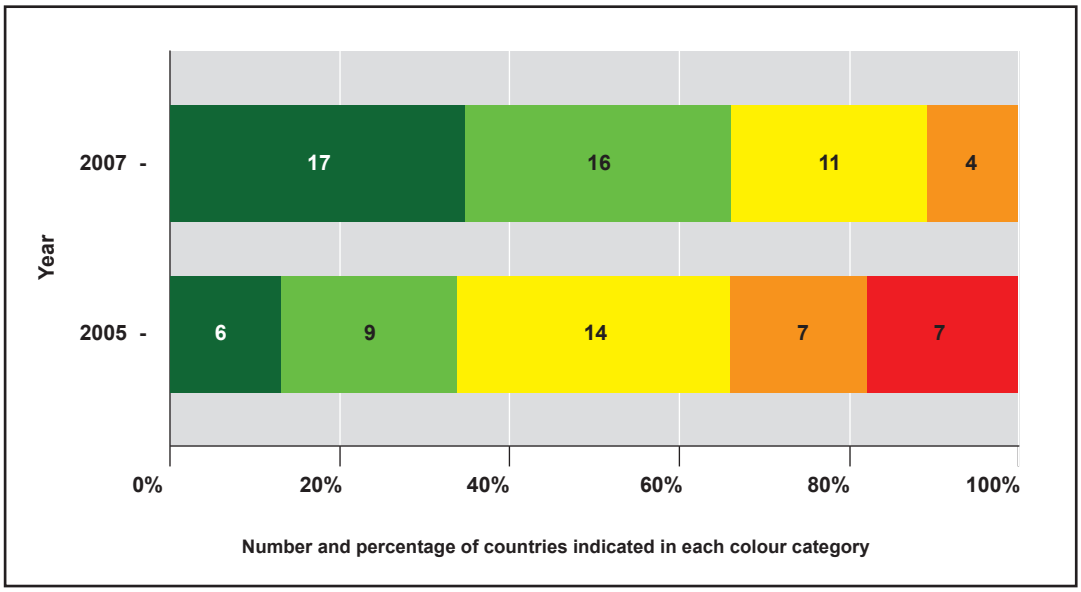


Fig. 2.8: Indicator 6 - Level of Student Participation in Quality Assurance Comparison 2005-2007

Every country had achieved some level of student participation in Quality Assurance, and in more than two-thirds of countries, students were participating in at least three of the four levels. This represented a significant increase since 2005.

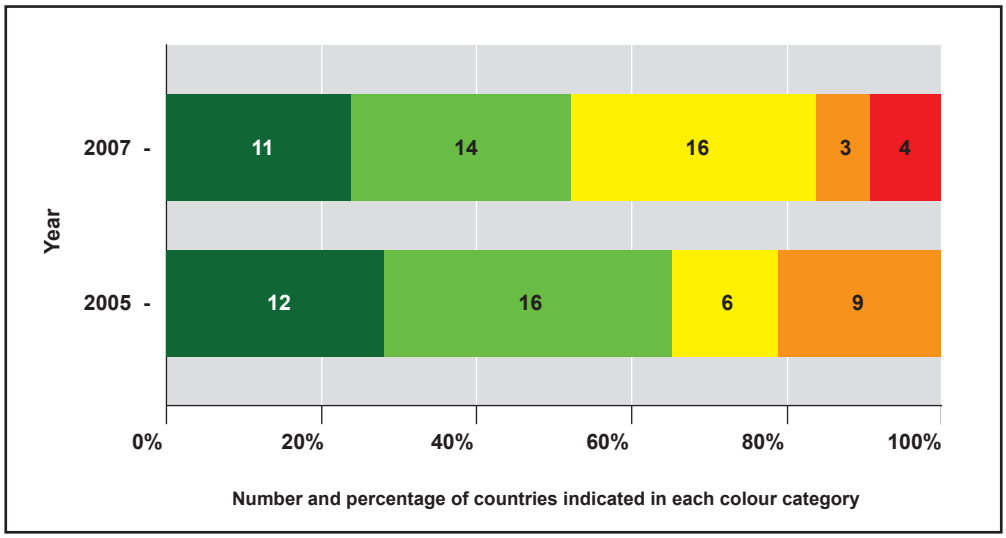


Fig. 2.9: Indicator 7 - Level of International Participation in Quality Assurance Comparison 2005-2007

The stock-taking results showed that the level of international participation in quality assurancewas still low, with less than a quarter of the countries in the green category. This was reflected in the fact that external review of quality assurance agencies was still at an early stage of development in most countries, so there could not be a high percentage of international participation in this area yet.

The challenge for the future was to increase international participation to guarante the international acceptance, openness and transparency of quality assurance processes in all countries.

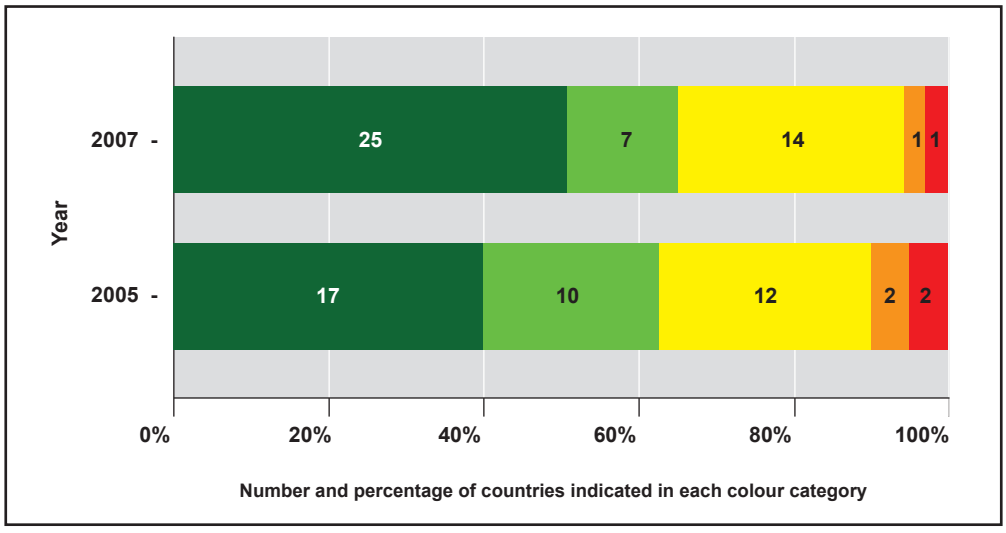


Fig. 2.10: Indicator 8 - Stage of Implementation of Diploma Supplement Comparison 2005-2007

The criteria to achieve a green and light green colour were the same in 2007 as in 2005, whilst the criteria for achieving yellow and orange were more demanding in 2007. There had been good progress in implementing the Diploma Supplement since 2005 and an overall progress was registered.

Fig. 2.11: Indicator 9 - National Implementation of the Principles of the Lisbon Recognition Convention

Many countries showed that they had recently amended their legislation and did not have legal obstacles preventing them from applying the principles of the Convention into practice. Some countries also extended the application of the Convention principles to applicants from countries that were not parties to the Convention. Countries had also produced national action plans for improving recognition. However, there were still problems in its implementation within institutions.

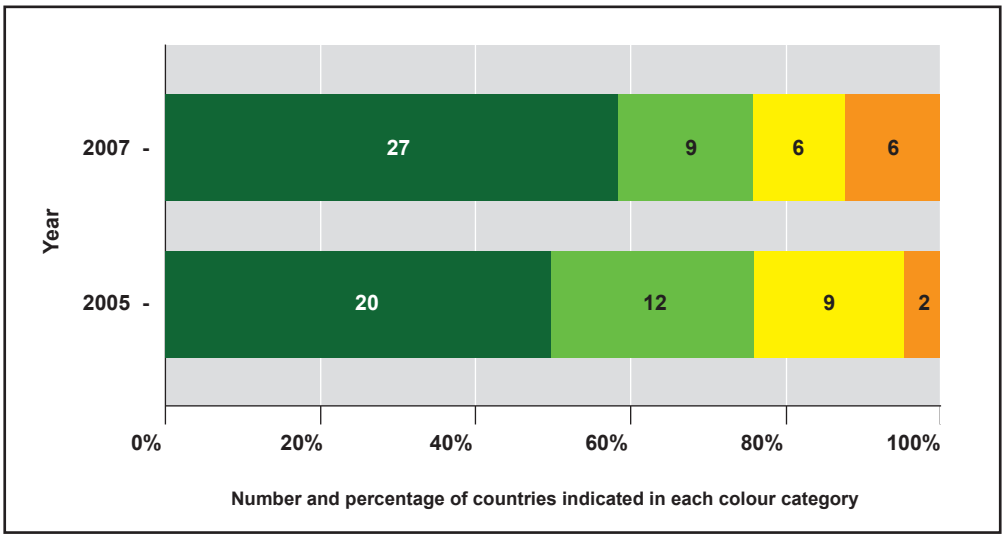


Fig. 2.12: Indicator 10 - Stage of Implementation of ECTS Comparison 2005-2007

Due to more stringent conditions to fulfil the different levels, the increase in the number of countries gaining high scores was relatively low, as this indicator shows.

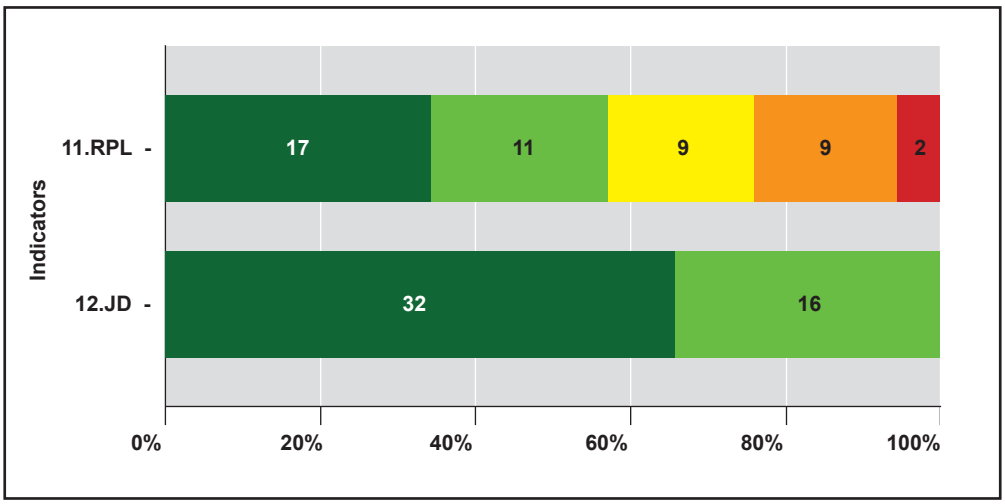


Fig. 2.13: Indicators 11 & 12 - Recognition of Prior Learning and Joint Degrees: number and percentage of countries in each colour category for indicators 11-12

Indicator 11 was an entirely new indicator in 2007. Procedures for the recognition of prior learning were perceived as being still at an early stage of development in the majority of countries. On the other hand, in the case of indicator 12, (joint degrees), many countries stated that legislation allowed Higher Education Institutions to award joint degrees with Higher Education Institutions from other countries.

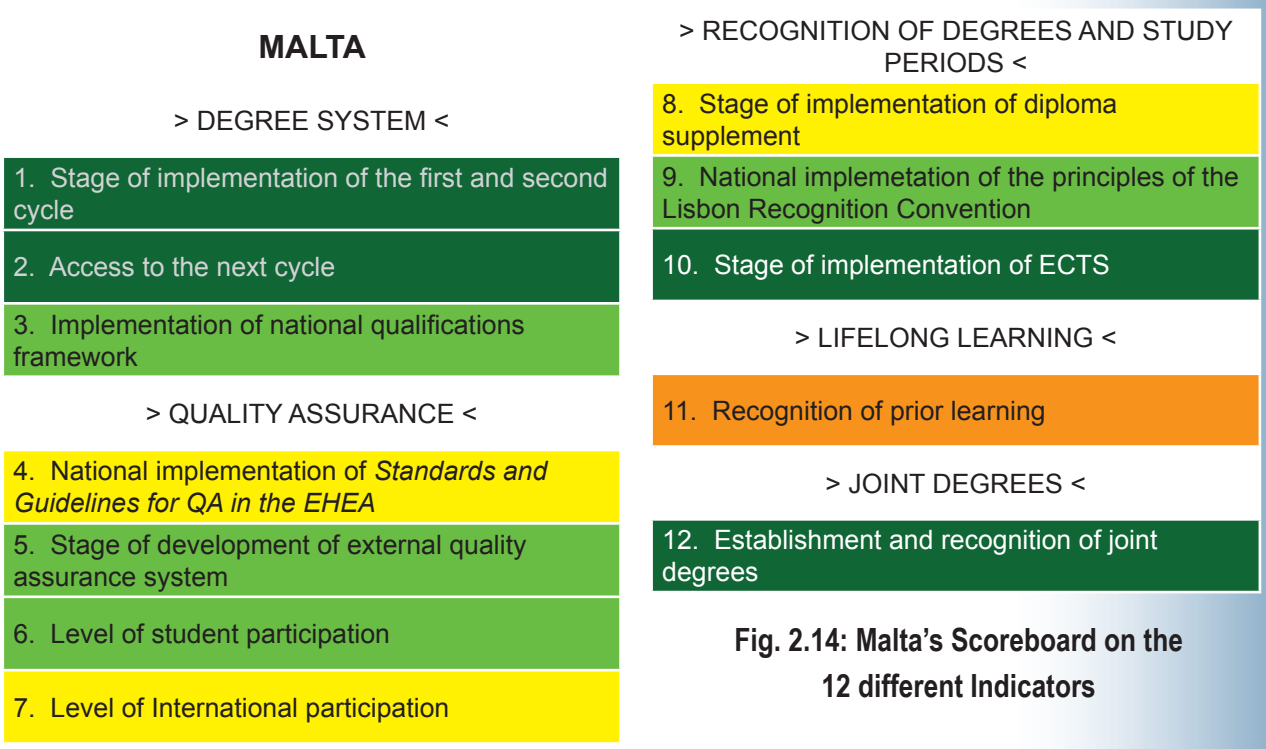


Fig. 2.14: Malta's Scoreboard on the 12 different Indicators

Malta fared excellent in four indicators, in terms of the implementation of the first and second cycle; access from one cycle to the next; the implementation of ECTS; as well as in establishing and recognising joint degrees. The rating was very good with respect to the implementation of the Malta Qualifications Framework; internal and external quality assurance; level of student participation; and implementation of the principles of the Lisbon Recognition Convention. The rating was good in terms of the Standards and Guidelines for Quality Assurance for EHEA and international participation and the implementation of the Diploma Supplement. The indicator requiring most improvement was the recognition of prior learning.

Between 2005 and 2007, Malta gained a lot of ground and was on the right track towards establishing the structural reforms in line with the 2010 targets.

2.5 Developments up to the National Report in preparation for the 2009 Ministerial meeting

The third national report[30] on developments regarding the Bologna Process was submitted on 28 October 2008. The main developments since London 2007 which were highlighted in this report, included: the harmonisation of postgraduate courses, second cycle, qualifications awarded by the University of Malta and the setting up of the Malta Qualifications Framework, which included the Dublin Descriptors. The National Commission for Higher Education also worked on Quality Assurance Standards, while the European Union Programmes Agency promoted mobility in Higher Education.

The University of Malta was reported to have approved new harmonised regulations for postgraduate awards, whilst MCAST was at the time, planning to introduce such programmes in 2010. Private Higher

30 Bologna Process National Report: Malta, October 2008.

Education Institutions also follow the two-cycle system. In the case of doctoral studies these were only on the basis of independent research.

A reasonable level of dialogue was also reported between institutions and employers on curriculum design, accreditation and quality assurance, as well as university governance. Malta was also one of the few countries which had established its National Qualifications Framework based on the European Qualifications Framework and responding to the Dublin descriptors.

The National Commission for Higher Education (NCHE) has since 2007 carried out a review of all aspects related to Quality Assurance within the Maltese Further and Higher Education system and developed proposals and recommendations on current licensing, accreditation, and Quality Assurance frameworks, taking into consideration national needs as well as the ESG and good practice in other countries. There were also developments in quality assurance systems in local Higher Education Institutions – namely the University of Malta, MCAST and ITS. At the University of Malta the Programme Validation Committee has been established to monitor, review and recommend programmes for approval by Senate. This committee is supported by the Academic Programmes Quality and Resources Unit (APQRU). At MCAST, Quality Assurance is supported by internal and external quality assurance reviews.

The NCHE report concluded that there is a weak national structure for external QA which has led to the development of legislation. There is student participation in all levels of Higher Education. The MQC is a member of ENQA-VET while NCHE was going to participate in ENQA.

The University of Malta had been issuing the Diploma Supplement in full conformity with EU/CoE/UNESCO Diploma Supplement format for a few years and in 2008, 50% of the students graduating in November/December 2008 received the DS. The Diploma Supplement is issued automatically, in English and is also free of charge. The University of Malta has been promoting the DS for greater use in the labour market ever since its launch.

The Lisbon Convention was ratified on 16 November 2005 and came into force in January 2006. These have been transposed into the National Legislation on 21 November 2006 by means of a Legal Notice 280 (2006).

The University of Malta had also been using ECTS for a number of years while ITS and MCAST were using a system of credits which is compatible with ECTS.
The Malta Qualifications Council had published a draft policy on the recognition of prior learning for consultation. In the meantime, the University of Malta still endorced the maturity clause, which allowed people over the age of 23 to apply for admission to courses based on their work experiences.

The University of Malta has also been involved in the provision and recognition of joint degrees through EU programmes such as ERASMUS Mundus. It has also launched Joint Masters programmes with the US.

The short-term future challenges identified in the Malta national report included:

- increasing research at the University of Malta by tapping possible funds from all resources;
- striking a balance between research and teaching duties of staff at the University of Malta in view of the increasing number of students.

The long term challenges included:

- promoting further growth of Higher Education and facing demands in terms of capacity and funding for tertiary education in Malta;
- catering for adult learning whithin Higher Education, in view of an ageing population.

2. 6 Results of the Stock-taking report in 2009

The 2009 stock-taking exercise involved indicators to verify whether the original goals to be obtained by 2010 were actually being achieved. The more demanding indicators used in this exercise resulted in a less "green" overall picture in 2009 compared to the two previous stock-taking reports in 2005 and 2007.

Malta obtained a dark green rating in three indicators. In indicator 1: Stage of implementation of the first and second cycle, which means that at least 90% of all[31] students were enrolled in a two-cycle degree system that is in accordance with the Bologna principles. In indicator 2: Access to the next cycle, which means that all first cycle qualifications give access[32] to several second cycle programmes and all second cycle qualifications give access to at least one third cycle programme without major transitional problems[33]. Indicator 8: National Implementation of the principles of the Lisbon Recognition Convention, which implies that the Lisbon Recognition Convention had been ratified and there was appropriate legislation complying with the legal framework

of the Convention. The later Supplementary Documents[34] have been adopted in appropriate legislation and applied in practice. Consequently the five main principles fulfilled where: applicants have a right to fair assessment; there is recognition if no substantial differences can be proven, in cases of negative decisions the competent recognition authority demonstrates the existence of (a) substantial difference(s); the country ensures that information is provided on its institutions and their programmes; and an ENIC has been established.

31 "All" = all students who could be involved in 2-cycle system i.e. Not those in doctoral programmes and Not those in short HE programmes. NB Students of All study fields are taken into account.

32 Access : the right of qualified candidates to apply and to be considered for admission (definition used in the Lisbon Recognition Convention).

33 Compensatory measures required for students coming from another study field will not be counted as "major transitional problems".

34 Recommendation on the Criteria and Procedures for Recognition (2001), Recommendation on the Recognition of Joint Degrees (2004), Code of Good Practice in the Provision of Transnational Education (2001) http://www.enic-naric.net

Malta

Implementation of degree system

1. Stage of implementation of the first and second cycle	5
2. Access to the next cycle	5
3. Implementation of national qualifications framework	4

National implementation of Standards and Guidelines for QA in the EHEA

4. Stage of development of external quality assurance system	3
5. Level of student participation in quality assurance	1
6. Level of international participation in quality assurance	1

Recognition

7. Stage of implementation of diploma supplement	3
8. National implementation of the principles of the Lisbon Recognition Convention	5
9. Stage of implementation of ECTS	3
10. Recognition of prior learning	3

Fig. 2.15: Malta's Scoreboard on the 10 different Indicators in the 2009 stock-taking report

Malta features in a light green rating in the indicator concerning the implementation of National Qualifications Frameworks. This means that an NQF compatible with the overarching framework of qualifications of the EHEA has been developed and that:

- the NQF includes generic descriptors for each cycle based on learning outcomes and competences;
- the NQF includes ECTS credit ranges in the first and second cycles;
- all necessary arrangements/decisions for implementing the framework are in place and the necessary formal decisions for establishing the framework have been taken;
- implementation of the NQF has started; and that
- the agreed self-certification procedure has started.

Malta obtained a yellow rating in another three indicators. Indicator 4 relates to the stage of development of an external quality assurance system and reflects how Malta had a quality assurance system which was in operation at national level, but did not yet apply to all Higher Education. The quality assurance system includes at least two of the four elements: self-assessment report; external review; publication of results; and follow-up procedures. It is also noted that no date had been set for a peer review of the national QA agency/agencies. The other three indicators rated yellow relate to recognition and show that in indicator 7: Stage of implementation of the Diploma Supplement, Malta has developed a DS in the EU/CoE/UNESCO format and in a widely spoken European language which is issued to some graduates or in some programmes free of charge. In the case of indicator 9: Stage of implementation of ECTS, in Malta ECTS credits were being allocated to all components of more than 75% of HE programmes, enabling credit transfer and accumulation, but ECTS credits were linked to learning outcomes only in newly developed courses at the time. With respect to indicator 10: Recognition of prior learning, in Malta,

national guidelines or policy for assessment of prior learning had been agreed upon or adopted, and were awaiting implementation.

A grading of 'red' was obtained only with respect to two categories under Quality Assurance. In indicator 5: Level of student participation in Quality Assurance, Malta included the participation of students at only one level (rather than in all), from the following: governance of national bodies for QA; external reviews of HEIs and/or programmes: either in expert teams, as observers in expert teams or at the decision making stage; in consultation during external reviews; in internal QA processes; or in preparation of self-assessment reports. With respect to indicator 6: Level of internal participation in Quality Assurance, in Malta structures and arrangements for international participation were not yet clear. This position has to be compared to the dark green level which requires international participation at four levels: within teams for external review of HEIs and/or programmes, as members or observers; national quality assurance agency membership of ENQA or other international quality assurance network/s; in the governance of national bodies for QA; and in the external evaluation of national QA agencies.

Malta's placing in the scoreboard in relation to the other Bologna signatory countries

In the case of the implementation of the degree system, Malta fared quite high, with a dark green rating (5) for both the implementation of the first and second cycle as well as access to the next cycle. In the case of the implementation of the National Qualifications Framework, Malta gained a light green rating (4).

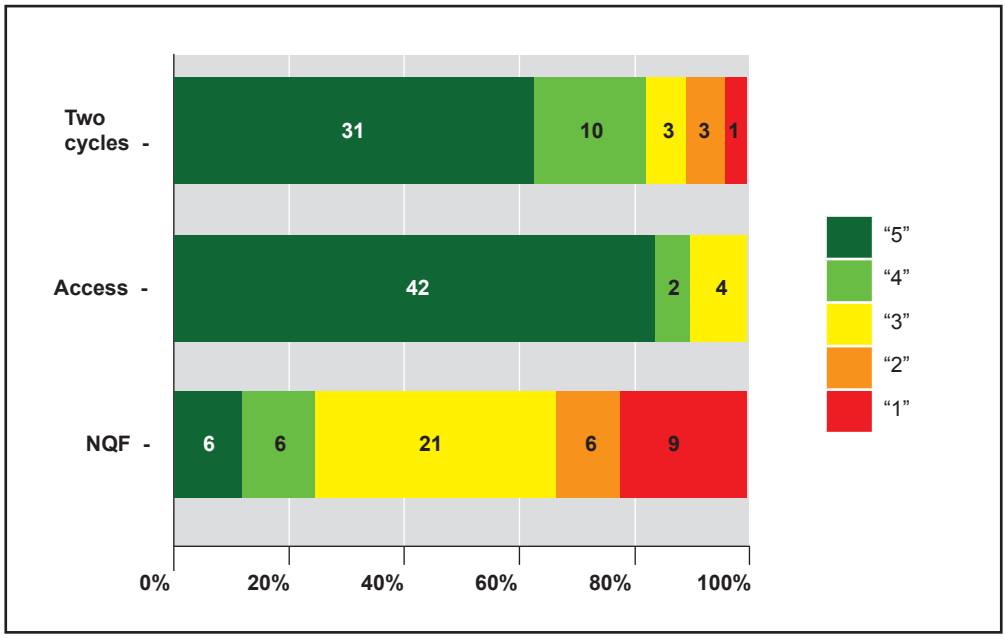


Figure 2.16: Summary of rating of countries with respect to the implementation of the degree system

When looking at the overall rating for all the Bologna signatory countries, it can be concluded that Malta, like many other countries, has achieved the two cycle system as well as access to the next cycle. Malta, even though obtaining a light green rating (4) when it comes to the NQF, has shown to be at a much more advanced stage when compared to many other countries. In fact, only six countries were at a more advanced stage than Malta in this area.

Malta obtained its lowest ratings in the section concerning Quality Assurance. It was rated at level 3 (yellow rating) with respect to the state of developing an external quality assurance system. The lowest rating, red rating, was obtained in the case of the level of student participation in Quality Assurance and the level of international participation in Quality Assurance. This means that Malta needs to improve and advance further particularly and most importantly in this area.

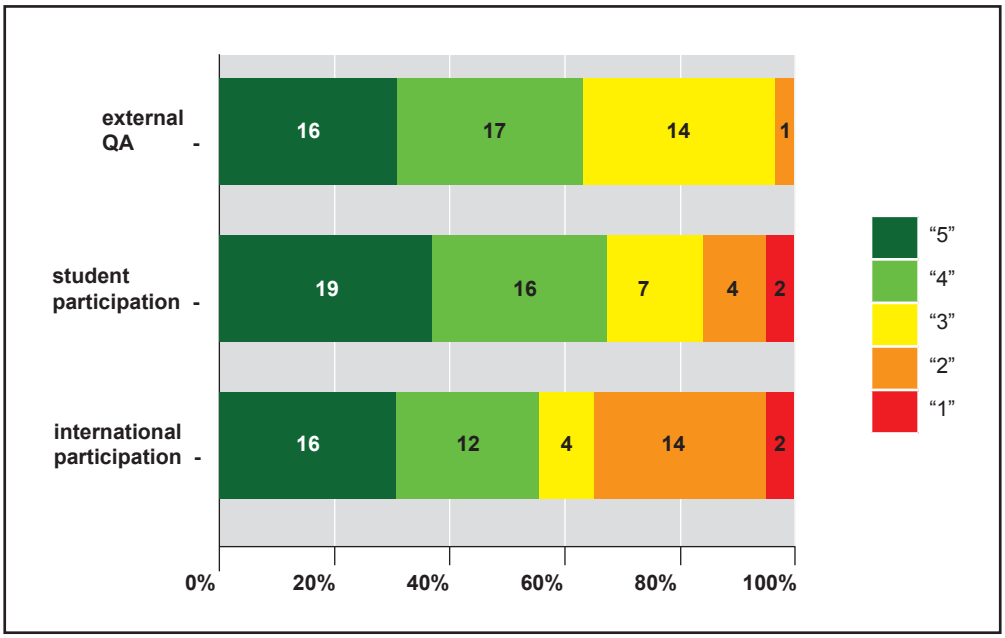


Figure 2.17: Summary of rating of countries with respect to national implementation of standards and Guidelines for QA in the EHEA.

When comparing Malta's ratings to those obtained by the other countries, it can be concluded that in the case of external Quality Assurance, Malta was still lagging behind. Malta needed to improve in various contexts particularly in student participation and international participation in quality assurance. Malta, being a small country with only one main University is still relatively new to the Quality Assurance culture as in the past not much regulation in terms of Quality Assurance was available. The Bologna process has introduced requirements in Quality Assurance with respect to which there were little existing structures to build upon.

In the case of Recognition, in 2008 Malta obtained a yellow light rating (3) for the Diploma supplement because up to 2010, not all graduates were given the Diploma Supplement by the University of Malta. Malta has since then implemented the principles of the Lisbon Recognition Convention to the full and obtained a dark green rating (5). The stage of development of ECTS was given a level 3 rating (yellow light) as not all courses at the University of Malta were using this credit system. Developments with respect to the recognition of prior learning were rated at level 3 (yellow light) as there have been improvements in Malta's Higher Education system. However, this area still needs to be developed further.

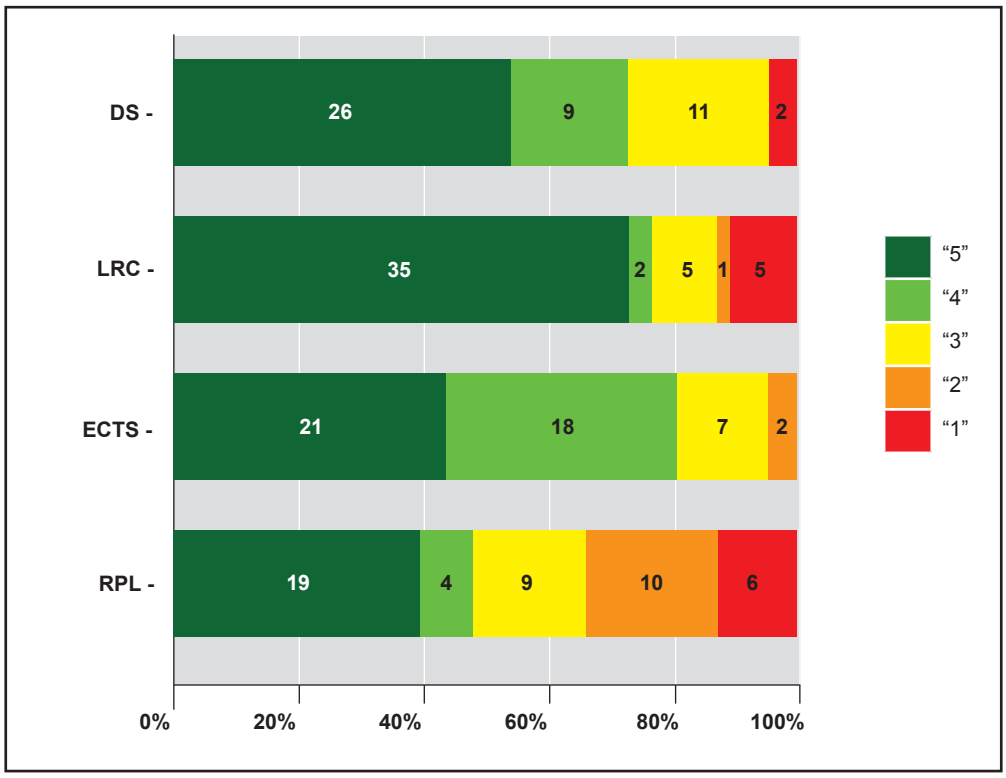


Figure 2.18: Summary of rating the countries' with respect to Recognition

According to these ratings, Malta appeared to be lagging behind other countries regarding the issuing of the Diploma supplement, as the majority of the countries issue it to all graduates. However, all 2010 graduates of the University of Malta have received the Diploma Supplement automatically and free of charge. Malta has also fulfilled the implementation of the Lisbon Recognition Convention like most of the other countries. Regarding the ECTS implementation, Malta was lagging behind also in this area. However, the University of Malta has implemented ECTS in the vast majority of courses by 2010 and thus improved the situation since the stock-taking exercise. Finally, Malta needs to catch up in various areas including the recognition of prior learning. MCAST has also implemented the maturity clause as another entry route to its courses in order to promote and encourage lifelong learning and address under-represented groups.

2.7 Conclusion

This chapter has traced the reported developments and Malta's position in implementing the structural changes to reach the targets of the Bologna Process. The overall conclusion is that a lot of work has been done and Malta is well on its way to achieving most of the targets set by the Bologna Process. Malta needs to up the ante mainly in the areas of Quality Assurance and recognition of prior learning in order to become an active player amongst the other EHEA countries. The publication of the *Referencing Report*[35] and a proposal for the classification of qualifications[36] are other major developments in education linking all sectors into one structure referenced to both the Dublin descriptors and to the European Qualifications Framework. This will place Malta at the forefront of the Bologna Process, helping Higher Education in Malta to be competitive and to reach government's vision of making Malta a Centre of Excellence in Education by 2015.

35 Ministry of Education, Employment and the Family, 2009, Referencing of the Malta Qualifications Framework (MQF) to the European Qualifications Framework (EQF) and the Qualifications Framework of the European Higher Education Area (QF/EHEA), Malta: Malta Qualifications Council;

36 Malta Qualifications Council, Classifying Qualifications: A National Awards System Referenced to the Malta Qualifications Framework: a proposal, Malta: Malta Qualifications Council

Chapter 3:
Using ECTS and DS in HEIs in Malta

3.0 Introduction

Two of the main developments concerning the Bologna Process were the implementation of the ECTS and the issuing of the Diploma Supplement to students graduating from *harmonised* degree courses at the University of Malta.

This chapter will review the significance and implications of these two key tools in promoting a European Higher Education Area and how students at the University of Malta will benefit from such developments.

3.1 The ECTS system and its implementation

A credit system is a systematic method of describing and quantifying an educational programme by attaching credits to its components. The European Credit Transfer and Accumulation System (ECTS) is a student-centred system based on the student workload required to achieve the objectives of a programme; objectives preferably specified in terms of the learning outcomes and competences to be acquired by the student[37]. It may involve face to face teaching, practical sessions as well as periods of self-study or in collaboration with other students.

The methodology of using ECTS was introduced in 1989, within the framework of the ERASMUS initiative, now falling within the Lifelong Learning Programme. The use of ECTS has been tested successfully as well as adopted by many Universities across Europe. ECTS had been originally set up for credit transfer. It facilitated the recognition of periods of study abroad and thus enhanced the quality and volume of student mobility in Europe. It has eventually been adopted by the Bologna Process and developed into an accumulation system implemented at institutional, regional, national and European levels for first and second cycle degrees within the European Higher Education Area (EHEA). ECTS makes study programmes within the European Higher Education Area easy to read and compare. They can be used across a variety of programmes and modes of delivery, making European Higher Education more attractive for students from other continents.

The European Commission described the key features of ECTS to be the following[38]:

- ECTS is based on the principle that the total number of credits in one academic year amounts to 60 credits. One credit usually amounts to about 25 working hours. This amounts to the student workload of a full-time study programme in Europe and is equal to, in most cases, around 1,500 to 1,800 hours per year;
- Credits in ECTS are usually described in learning outcomes and can only be obtained after successful completion of the work required and appropriate assessment of the learning outcomes achieved. Learning outcomes are described as sets of competences, expressing what the students should know, understand or be able to do after completion of a process of learning.
- Student workload in ECTS consists of the time required to complete all planned learning activities such as attending lectures, seminars, independent and private study, preparation of projects, examinations, and so on and so forth.
- Credits are allocated to all the different types of educational components in a study programme (such as modules, courses, placements, dissertations, etc.) and reflect the quantity

37 European Commission, 2007, European credit transfer and accumulation system (ECTS) Key features
38 Ibid.

of work each component requires to achieve its specific objectives or learning outcomes, in relation to the total quantity of work necessary to complete a full year of study successfully.

- Student performance is documented by a local/national grade. It is good practice to add an ECTS grade, in particular in the case of credit transfer. The ECTS grading scale ranks the students on a statistical basis. Therefore, statistical data on student performance is a prerequisite for applying the ECTS grading system.

Implementation by the University of Malta

The Senate of the University of Malta originally approved the University of Malta General Regulations for University Undergraduate Awards in 2004 which were published as a legal notice on 16 March 2004. In September 2008[39] there were amendments to these regulations following other changes that were effected in 2005. Article 34 of the 2008 regulations states that a credit value is assigned to each study-unit, including time devoted to tuition, private study and assessment. On average, a student might be expected to spend 25 hours of learning, of which 5-7 hours are normally direct teaching when a study-unit is imparted in the traditional lecturing mode.

The regulations specify that credit codes assigned for undergraduate courses need to be given different levels ranging from 0-4. Level 0 is considered as pre-tertiary or at foundation or proficiency level study-units. Study-units at level 1 are normally offered in the first year of an undergraduate course and it is assumed that the students have a general level of education at least meriting the award of the Matriculation Certificate (level 4 on the MQF). Levels 2 & 3 study-units are usually offered in the second and third years of an undergraduate course. Level 3 credits may also be offered in the fourth year of an undergraduate non-professional course. Lecturers can assume that students have the required skills associated with studying at tertiary level. Level 4 study-units are offered in the fourth and fifth years of a professional course.

The credit loading for the different level courses offered are stated in terms of ECTS credits and reflect the implementation of the Bologna Process. These are shown in Figure 3.1. As can be noted, the number of ECTS assigned to the different first-cycle courses reflect the amount of ECTS as proposed by the Bologna Process – ranging between 180 and 240 ECTS for first-cycle courses. In addition, article 1, in the glossary states that a total of 60 credits are assigned to the study-units that students are expected to complete over one full-time academic year.

39 General Regulations for University Undergraduate Awards, Approved by Senate in March 2004 and amended in 2005 and on 18 September 2008, by the University of Malta.

University Undergraduate Award	Requirements
University Certificate	30 credits of which not less than 26 credits not below level 1.
University Diploma	Between 60 and 90 credits, as specified in the bye-laws for the course, of which not more than 10 level 0 and not less than 56 level 1.
University Higher Diploma	Between 60 and 90 credits, as specified in the bye-laws for the course, of which not more than 10 level 1 and not less than 56 level 2.
Bachelor	180 credits of which not more than 4 level 0, not less than 56 and not more than 108 more or less divided equally between level 2 and 3.
Bachelor (Honours in one area of Study) **(three year full-time professional course)**	180 credits of which not more than 4 level 0, not less than 56 and not more than 68 level 1, and not less than 108 more or less divided equally between levels 2 and 3 of which not less than 56 level 3 credits assigned to the area taken at honours.
Bachelor (Honours in two areas of Study) **(4 year full-time course)**	240 credits of which not more than 4 level 0, not less than 56 and not more than 68 level 1, and not less than 168 or less divided equally between levels 2 and 3 of which not less than 56 level 3 credits in each of the two areas at honours.
Bachelor (Honours in two areas of Study) **(4 year full-time professional course)**	240 credits of which not more than 4 level 0, not less than 56 and not more than 68 level 1, and not less than 168 levels 2, 3, and 4 of which not less than 100 at levels 3 and 4.
Bachelor (Honours) and any other undergraduate award following a 5 year professional course	300 credits of which not more than 4 level 0, not less than 56 level 1, 56 level 2 and a further 168 at levels 3 and 4.

Fig. 3.1: Distribution of ECTS for the different Undergraduate Courses

At postgraduate level, course regulations[40] also specify the number of ECTS credits. At post-graduate certificate level, 30 credits, of which not less than 25 credits are to be at level 5. The post-graduate Diploma is to consist of 60 credits, of which not less than 55 credits are to be at level 5. For Masters' degree, there should be 90 – 120 credits, of which not less than 80 credits are at level 5, and including a dissertation to which not less than 30 credits are assigned.

The University of Malta has also implemented the framework of describing ECTS in terms of learning outcomes. When one looks at the forms used for credit course descriptions, there is a subheading for tutors to specify the intended learning outcomes for knowledge and understanding as well as for skills (including transferable and generic skills).

40 Legal Notice 120 of 2008 – Malta Government Gazette No. 18,227 – 11 April 2008.

Implementation at MCAST

In 2009, MCAST started issuing the first professional degrees. These were introduced as an extension to the Business and Technology Education Council (BTEC) courses, which MCAST had been running for the past years. BTEC is based on an equivalent of 60 ECTS of learning per year. The top-up professional degree offered by MCAST is also in line with the use of ECTS, and the additional year of study is equivalent to 60 ECTS, which leads to a degree based on a total of 180 ECTS, in line with the Bologna model.

3.2 Implementation of the Diploma Supplement at the University of Malta

In the Berlin Communiqué, Ministers of Higher Education stated that '*every student graduating as from 2005 should receive the Diploma Supplement automatically and free of charge. It should be issued in a widely spoken European language'*. They appealed to institutions and employers to make full use of the Diploma Supplement, so as to take advantage of the improved transparency and flexibility of the Higher Education degree systems, for fostering employability and facilitating academic recognition for further studies. This set another target for the signatory countries to achieve.

In order to provide a common general format for Universities to adopt, a template was developed by a joint European Commission - Council of Europe - UNESCO working party that tested and refined the sample. UNESCO-CEPES[41] actively participated in the UNESCO/Council of Europe/European Commission Working Group and Pilot Project on the Diploma Supplement. The main purpose was the development of a new model for a Diploma Supplement which took into account various practical national experiences, and thus could better serve as a practical tool to enhance international 'transparency' and to improve recognition in response to contemporary developments in European Higher Education. The Diploma Supplement was developed to facilitate the implementation of the *Convention on the Recognition of Qualifications Concerning Higher Education in the European Region*, Lisbon 1997. It was further tested as part of the Phare Multi-Country Project, *Recognition of Higher Education Diploma and Study Credit Points across Borders*[42]. A guidebook on the founding principles and structure of the DS was developed.

The Diploma Supplement (DS) is a document issued on completion of a Higher Education qualification and aims to improve international 'transparency' and facilitate the academic and professional recognition of qualifications (diplomas, degrees, certificates etc). It is designed to describe the nature, level, context, content and status of the studies that were successfully completed by the individual named on the original qualification, to which the supplement is appended[43].

The guidelines produced describe the founding principles on which the DS was developed. They make strong recommendations concerning the principles and good practice behind effective supplements. The guidelines also provide explanatory notes and further detailed advice to Higher Education institutions that create supplements.

The Diploma Supplement is based on seven main important founding principles that respect national and international academic autonomy. The Diploma Supplement is:

41 http://www.cepes.ro/

42 European Commission, Council of Europe and UNESCO/CEPES, Outline Structure for the Diploma Supplement.

43 http://ec.europa.eu/education/policies/rec_qual/recognition/diploma_en.html

1. A flexible, non-prescriptive tool, capable of adaptation to local needs. It can be used to replace or augment current approaches. Existing transcripts and explanatory systems can be integrated into the framework or be superseded by it;
2. A device that has national and international applications. It has been designed to aid the resolution of international recognition problems as well as domestic ones;
3. A system to aid recognition for academic and professional purposes. It is potentially useful for all Higher Education Institutions, professional bodies, students, employers, public bodies, governments and citizens;
4. An approach which excludes claims and value-judgements concerning equivalence by providing sufficient objective information to allow the recipient to make his or her own judgements about the qualification in question. It thus facilitates the process whereby judgements are made by autonomous national or local bodies (academic, professional, governmental, etc). It eases the process of access and recognition;
5. A tool that should be used with sensitivity. The recognition of foreign qualifications should be viewed as a process for the assessment of the competence, experience and knowledge acquired, recognising that 'fair recognition' instead of exact equivalence should be sought. Users of the supplement are encouraged, where possible, to focus on the outcomes of the learning that has taken place and to make their judgments using the qualitative and quantitative information provided;
6. A set of guidelines have been developed in order to avoid the inclusion of too much detail which can confuse the user. This minimalist approach acknowledges the cost of producing the supplement and wherever possible encourages reference to other information sources that could be consulted. However, the Diploma Supplement should provide all the necessary information for a judgment to be made without repeated demands for more data;
7. An addition to the original credential. The credential should remain unchanged from its normal state (in its approved language and textural form). The Diploma Supplement should accompany the authentic credential that certifies the award. It is not a substitute for it. Furthermore, the Diploma Supplement can be used in conjunction with other appropriate documentation, including curriculum vitae, etc. A person may well have several Diploma Supplements, each accompanying an individual qualification[44].

The proposed DS is composed of eight sections (Information identifying the holder of the qualification, Information identifying the qualification, Information on the level of the qualification, Information on the contents and results gained, Information on the function of the qualification, Additional information, Certification of the Supplement, Information on the National Higher Education system). Information in all eight sections should be provided. Where information is not provided, an explanation should be given.

Structure of the Diploma Supplement issued by the University of Malta

The University of Malta took up the challenge of developing its own Diploma Supplement and set up a Senate sub-committee to work on the format which the University of Malta Diploma Supplement was to take. The Diploma Supplement was developed to make University of Malta qualifications more readable and easily comparable both locally and abroad, as it gives a precise description of the academic course and of the competences acquired by the student during the study period. It also aims to give a fair judgment of graduates' achievements and competencies, to facilitate access to opportunities for work or further studies and lifelong learning locally and abroad, and to foster graduates' employability across Europe.

44 Information extracted from European Commission, Council of Europe and UNESCO/CEPES, Outline Structure for the Diploma Supplement.

The structure of the Diploma Supplement issued by the University of Malta includes the main fields as recommended in the guidelines:

1. **Information Identifying the Holder of the Qualification:** This section includes information about the person obtaining the qualification such as name, surname, date of birth, and identity card number;
2. **Information Identifying the Qualification:** This section includes information about the qualification – the level of the qualification, the area of study and the institution issuing the qualification, its legal status and the language of the DS;
3. **Information on the Level of the Qualification:** The third part of the DS provides information on the level of the qualification, the duration of the course of studies followed as well as the entry requirements to follow the said course;
4. **Information on the Contents and Results Achieved:** This field provides information on whether the study was on a full-time or part-time basis, the different components of the course, the credits followed and grades obtained, an explanation of the grade ratings, the title of the award achieved, the classification and the date of award of the qualification;
5. **Information on the Function of the Qualification:** This section provides information on the eligibility of the individual for further study, after the awarding of the said qualification, as well as to what professional warrant/affiliation it provides access to in Malta;
6. **Additional Information:** This section provides background information on what competences and job responsibilities the qualification awarded allows the individual to practice. Other additional information usually includes relevant websites which would help those reading the DS and, are unfamiliar with the educational structure in Malta, to consult websites which provide further information on the level and type of qualification awarded;
7. **Certification:** This field includes the official signature and stamp from the University to make the DS an official document
8. **Information on the National Higher Education System:** This final field provides further information about the Higher Education system in Malta.

The first few Diploma Supplements were issued in the 2006 Graduation as a pilot project. In 2007 the University of Malta awarded the Diploma Supplement to over 200 graduates[45] in the Bachelor of Engineering (Honours), Bachelor of Science (Honours) in Information Technology, Bachelor of European Studies, Bachelor of European Studies (Honours) and Bachelor of Psychology (Honours) courses. In November/December 2010, the University of Malta issued the Diploma Supplement automatically and free of charge to all the students graduating from the University of Malta.

3.3 Conclusion

This chapter reviewed the state of development regarding the implementation of the ECTS and the Diploma Supplement in Malta, mainly at the University of Malta and MCAST, which also started issuing degrees in 2009. The University of Malta has now fully implemented the publication of the Diploma Supplement for all its graduates, and has implemented the ECTS system to almost all of its courses offered.

Nevertheless, one must not forget that in Malta there are other Higher Education Institutions (including private institutions) which offer tertiary education, even if they act as representatives of foreign Universities. The recent publications regarding the referencing of qualifications and the classification of qualifications by the Malta Qualifications Council (MQC) are a step forward towards ensuring that these institutions also keep in line with the Bologna Process initiatives and targets.

45 (http://www.um.edu.mt/newsoncampus/features/archive/europassdiplomasupplement)

Chapter 4:
Achieving Quality in HE Institutions
The State-of-Play

4. 0 Introduction

A press release issued by the then Ministry of Education, Youth and Employment in January 2008, highlighted how *Government's vision of developing Malta into an international centre of excellence in further and higher education by 2015 requires a modern regulatory environment that ensures sectoral growth and promotes high quality standards. The Government believe (d) that the necessity of quality assurance, accreditation and licensing (was) not an option but a pre-requisite for such a vision*[46].

It is to be noted that the need to ensure quality in Higher Education is not a new concept for Higher Education in Malta. The University of Malta has a long term history of forms of quality assurance through the use of external examiners and periodic reviews. Since 2009 MCAST has also started to offer professional degrees which also need to be quality assured. The Bologna Process, in working towards ensuring quality across the European Higher Education Area, has highlighted the important role of quality assurance. This has brought with it the need for further regulation at National level, as well as the implementation of structures for quality assurance within Higher Education Institutions in Malta. This chapter will review the changes that have taken place at a national level. It will then move on to consider the provisions for Quality Assurance developed within local Higher Education Institutions, mainly the University of Malta but also MCAST and the Institute of Tourism Studies.

4.1 Regulation of Higher Education Institutions at National Level

The main initiative in national regulation of Higher Education was the setting up of the National Commission for Higher Education (NCHE). The NCHE was established in 2006 to consult and advise Government through the Minister responsible for Education, to engage in a structured dialogue with all institutions, and inform the public on issues relating to sustainable development of the further and Higher Education sectors to meet the needs of society. The first interim Commission was nominated on 3 February 2006[47].

The National Commission for Higher Education has the mission to promote "more and better further and higher education to empower students with knowledge and skills for their future". It is entrusted with the furtherance and expansion of Higher Education to meet education requirements adopted by the government.

The main functions of the NCHE are:

- To develop a forum for structured dialogue amongst all stakeholders;
- To appoint an international advisory panel of experts;
- To collect data, statistics, financial, audit, and other reports of all Further and Higher Education institutions;
- To maintain an updated register of authorised and accredited institutions and programmes available in Malta;
- To publish the following annual reviews:
    - National Strategy for Further and Higher Education;
    - Key Performance Indicators on the Further and Higher Education sectors in Malta;
    - Benchmarking performance against international developments[48].

46 Ministry of Education, Youth and Employment, 11 January 2008, A quality assurance framework for Further and Higher education in Malta.
47 www.nche.gov.mt/page.aspx?pageid=52
48 http://www.nche.gov.mt/

In 2006-2007, the areas that were a priority and that shaped NCHE's activities were the following:

- Putting forward recommendations to the Minister for Education for a framework for licensing, accreditation and quality assurance in line with the Standards & Guidelines for Quality Assurance in the European Higher Education Area within the Bologna Process.
- Contributing towards the development and launch of the Malta Government Scholarship Undergraduate Scheme in 2007 that supports Maltese students undertaking first-degree studies in non-state Higher Education providers and complements the MGSS Scheme for post-graduate studies.
- Working to submit its recommendations to the Ministry for Justice & Home Affairs on the admittance of third country nationals for the purpose of carrying out scientific research that became a legal notice incorporated as an amendment in the Immigration Act in 2008.
- Addressing the need to revise the governing structure of state-funded institutions and review the funding framework within which state institutions operate.

In 2007, NCHE focused on the provision of quality assurance and licensing of educational institutions in Malta. It produced a report[49] which outlined recommendations for a new licensing, accreditation and quality assurance framework, applicable to all public and private providers of further and Higher Education and their programmes. This framework was considered a pre-requisite and a hallmark for government's vision of developing Malta into an international centre of excellence in further and Higher Education by 2015.

In reviewing the local education system, the report highlighted that at further education level [MQF Levels 1-5, including sixth forms, the Malta College of Arts, Science and Technology (MCAST) and the Institute of Tourism Studies (ITS)]; providers were currently operating under a number of different provisions. This was the case for all levels of education provision from compulsory to Higher Education. It was argued that there was a need for a reform in this sector and the following improvements were proposed:

- development of criteria and conditions to grant a licence to public or private providers of further or Higher Education;
- a link between the granting of a licence and the requirement for providers to have institutional accreditation, and accreditation of all the programmes they offer;
- the carrying out of regular reviews of the quality of the further or Higher Education services offered by providers, in order for the licence to continue to apply;
- a licence structure, which categorises the type and level of provision a licensee is authorised to offer and award; and
- the requirement for programmes offered to lead to recognised qualifications[50].

The Report emphasised that the new framework needed to include crucial elements of accreditation and quality assurance, which were listed as:

- a system for carrying out institutional accreditation of providers of (general, vocational or professional) further or Higher Education, whether public or private;
- a system for carrying out accreditation of programmes offered by the same providers at a Further and Higher Education level;
- a system to verify and endorse the integrity of foreign accreditation and the quality assurance of provision of programmes leading to foreign qualifications in Malta; and
- a formal basis on which to determine which foreign providers to attract to Malta.

49 A Quality Assurance Framework for Further and Higher Education in Malta, December 2007, Report by the National Commission for Higher Education to the Minister of Education, Youth and Employment.

50 A Quality Assurance Framework for Further and Higher Education in Malta, December 2007, Report by the National Commission for Higher Education to the Minister of Education, Youth and Employment. p.12

Based on the need for better regulation of further and Higher Education, the report puts forward a proposal for a new framework aimed at quality assurance based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). The proposed quality assurance framework aims to foster a 'quality culture', to improve the quality of education offered to students, to provide a means of accountability for the use of public funds, and make available reliable information about the quality of providers and their programmes to students, employers and the public.

NCHE proposed the following initiatives:

- setting up a competent authority for granting licences;
- different licence categories and associated costs;
- a streamlined application process for a licence;
- recognition of accreditation agencies;
- standards and criteria for licence holders, accreditation agencies, internal and external quality assurance evaluations, the accreditation process, decisions and reports;
- appropriate appeals procedures; and
- cooperation in quality assurance and accreditation at an international level.

The framework proposed four elements: adequate internal quality assurance mechanisms; external quality audits to verify these internal mechanisms; accreditation decisions based on the results of external audits; and the granting of a licence upon attainment of accreditation. External quality audits are to be carried out every five years.

It was recognised that the framework would be beneficial to students seeking to have their qualifications recognised internationally and within the local labour market, to local and foreign providers operating in Malta and to providers offering home-grown programmes overseas.

The NCHE report highlights how the proposed framework will ensure that Malta's reputation for excellent further and Higher Education provision is safeguarded and that investment in quality private provision is an integral part of a strategy to increase further and Higher Education activity in the future.

4.2 Quality Assurance at the University of Malta

The University of Malta has also been taking measures to improve its provision of quality assurance in line with developments and demands of the Bologna Process. In 2007, it established the Academic Programmes Quality and Resources Unit (APQRU) and the Programme Validation Committee (PVC).

The Programme Validation Committee (PVC) is a standing sub-committee of Senate and has replaced the Senate Sub-Committee on Approval of Courses and Regulations. The main functions of the PVC, composed of academic members of staff nominated by Rector, are:

- to provide quality assurance mechanisms acceptable to Senate and appropriate for internal and external audit purposes;
- to ensure that academic programmes are of appropriate standard;
- to ascertain the validity of the programmes on offer; and
- to ensure optimal use of available resources.

The PVC is assisted in its task by the Academic Programmes Quality and Resources Unit (APQRU) which also provides on-site and off-site assistance to departments and faculties, institutes and centres with regard to validation procedures. APQRU is dedicated to the facilitation of quality assurance and improvement activities intended to promote a culture of commitment to excellence in the provision of academic services.

The functions and responsibilities of APQRU are the following to:

- assist the PVC in the validation of new programmes and study-units;
- provide on-site and off-site assistance to faculties, departments, institutes, and centres with regard to validation procedures;
- assist the PVC in its role of providing quality assurance and improvement mechanisms, and of ensuring that academic programmes on offer at the University of Malta are of the appropriate academic standard;
- develop and review quality and enhancement procedures;
- track the implementation of recommendations arising from review processes;
- analyse the outcomes of review processes at an institutional level;
- disseminate good practice arising from review processes ;
- ensure that the student experience and enhancement of that experience is a paramount priority at the University of Malta;
- develop and implement policy which enables the University to assure itself of the quality and standards of programmes on offer;
- assist the PVC in its role of ensuring optimal use of available resources; and
- help the University prepare for external scrutiny and review[51].

Among the reforms brought about by the setting up of this new structure, is the system for the validation of new programmes offered by the University of Malta. This new process ensures that standards and quality are kept across all programmes of studies and at all levels at the Alma Mater. This is a key mechanism by which the University establishes academic standards, ensuring that the academic rationale for new programmes is fully exposed and understood; the requirements for students to achieve the intended learning outcomes are clear; and resources can be provided to deliver the programme to standards matching those at international levels and acceptable to the University. The validation process also aims to ascertain that proposed programmes are in line with the University of Malta's overall vision and strategy and that they are responsive to market demands. The procedure for the approval and validation of new programmes is designed to be rigorous and effective, whilst also encouraging appropriate innovation.

Overview of the Process

Academic programme planning involves two stages. The first stage concentrates on the practicality and feasibility of the idea generated within the overall vision and strategy of the University. The second stage focuses on the design and detailing of the academic programme. *First Stage Approval*

- **Step 1**: Programme Originators/Departments submit Stage 1 to AQPRU - proposal form to provide preliminary details of the proposed programme. The proposal form must be submitted at least 12 months prior to the intended commencement of the proposed programme. APQRU provides programme originators with any assistance which may be required in the compilation of such preliminary details;
- **Step 2**: APQRU refers the proposal form to the PVC for preliminary approval, if in line with requirements; or to the programme originators for amendment as necessary;
- **Step 3**: PVC refers to Senate for "In-principle" approval or returns the proposal to the originators for amendment;
- **Step 4**: If additional funds are required to run the proposed programme of study, Senate refers to Council for approval;
- **Step 5**: Programme development can continue subject to Council approval for additional funding (when required);
- **Step 6**: If "In-principle" approval is given by Senate, and no significant additional funds are required, Senate advises APQRU to inform programme originators to move on to the approval phase.

51 http://www.um.edu.mt/apqru/programmevalidationcommittee

Second Stage Approval

- **Step 7**: APQRU liaises with programme originators and Officers in charge to submit the Stage 2 proposal form by a given deadline;
- **Step 8**: Proposal form is submitted to Board of Faculty, Institute or Centre for approval;
- **Step 9**: Proposal form together with detailed study-unit approval forms for all new study-units listed in the programme are subsequently forwarded to APQRU;
- **Step 10**: If all documentation is submitted in line with requirements, APQRU forwards the proposal form to the PVC for recommendation;
- **Step 11**: PVC submits its recommendation to Senate for confirmation of final approval.

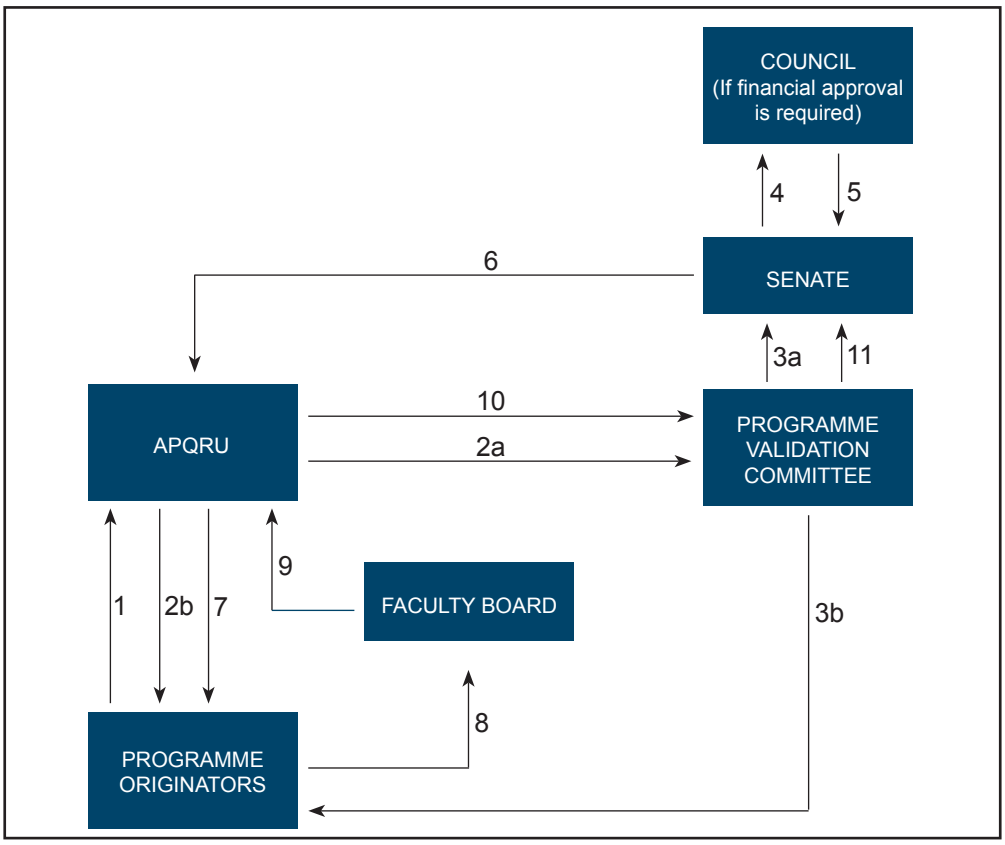


Fig. 4.1: Summary of the Procedure for the Validation of Programmes at the University of Malta.

The faculties filling in the Stage 1 proposal form need to provide details of the list of credits as well as financial breakdown of expenses. It also provides space for recommendation of external reviewers should the PVC want to have feedback. The stage 2 proposal form requests that the coordinator identifies the learning outcomes for the course as well as approval from Faculty Board. The procedure shows how the University of Malta has been working towards conforming to requirements as highlighted by the Bologna Process.

Student Feedback

APQRU has also been working on increasing the participation of students in the evaluation process of its training provision. Students, as the main key stakeholders, play a critical part in the evaluation, development and enhancement of the quality of this learning experience. The Bologna Process has put an increasing emphasis on the need for involvement of students in the quality assurance of Higher Education[52]. Student feedback on study-units has the objective of: providing students with

52 http://www.um.edu.mt/apqru/studentfeedback

the opportunity to comment on the quality of their learning experiences; assessing the success of academic provision in relation to the expectations of students; and providing feedback to lecturers in order to improve delivery and/or content of the study-unit.

Feedback takes place by inviting students to complete an online feedback form, on an anonymous basis, towards the end of the selected study-unit programmes. This process occurs on a twice-yearly basis: towards the end of the first Semester, in January, and towards the end of the second Semester, in June. Feedback is collected after students have been assessed on that particular unit, but prior to the publication of results.

The student feedback form focuses on the following issues:

1. General questions on the study-unit;
2. Comparison between study-unit description and actual delivery;
3. Lecturing methodology;
4. Lecturer attributes;
5. Method of assessment;
6. Administration and resources; and
7. Any additional comments.

Not all units are evaluated each time but a good number are reviewed after a period of time. Results of the feedback process are made available to the lecturers of the study-units concerned, the Heads of Departments and the Rector, and areas for appropriate follow-up action are identified and communicated to the Departments. The feedback is then used for further improvement of training provision. This is summarized in the figure below:

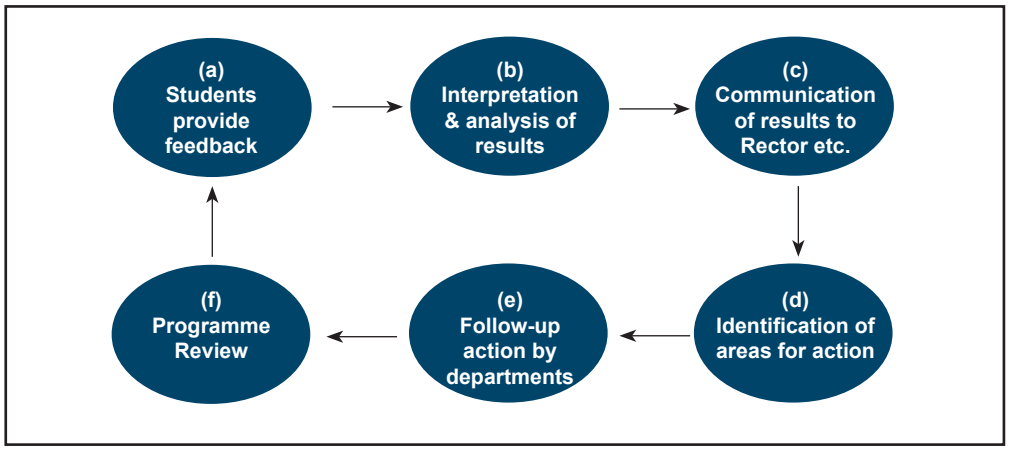


Fig. 4.2: Summary of Student Feedback Cycle[53]

APQRU is also currently involved in the development of a methodology to be followed for the regular review of programmes. The intention is that programmes are to be reviewed every number of years so that they are updated to ensure their relevance to the labour market as well as to ensure that quality training is provided.

Assessment Procedures

The University of Malta has also implemented changes in the assessment procedures in order to increase quality assurance in the process. A legal notice, part of the Education Act, was promulgated

53 http://www.um.edu.mt/apqru/studentfeedback

in 2009 and amended in 2010[54] to ensure these standards for assessment across University.

The regulations specify that there should be a Board of Examiners for the assessment of each Study-Unit. The Board of Examiners is to be solely responsible to Senate for determining the marks to be awarded to each student. The Board of Examiners is also appointed by Senate on the recommendation of the Board and is composed of the Head of the Department academically responsible for the Study-Unit concerned to act as chairman, the external examiner when one is appointed, and not less than two other examiners including the lecturer or the Study-Unit Coordinator. In cases where the Head of Department is also responsible for the teaching of the Study-Unit, the Head may delegate the chairmanship.

The regulations specify that the Board of Examiners, collectively, is responsible for: the preparation of the Assessment to ensure that it meets the requirements and objectives of the Study-Unit and that it covers the subject content specified in the Study-Unit description or syllabus; and the correction of scripts and the moderation and award of the final marks.

The Chairman has the responsibility to ensure that the process of examination is conducted properly and in a timely manner; where necessary, to engage in discussion with members of the Board of Examiners with a view to agree with the assessment questions and marking scheme; and convene a meeting of the Board of Examiners to review and agree results, provided that a Department may agree that the Boards of Examiners of all or of selected study-units are convened at one meeting during which the results of the study-units concerned are discussed. In such cases the responsibility of agreeing the results of each Study-Unit remains solely with the members of the Board of Examiners appointed for that Unit.

The lecturer or Study-Unit Coordinator is responsible for setting up the questions, the marking scheme, and/or any other Assessment criteria as appropriate, provided that when a Unit is taught by more than one lecturer, the Study-Unit Coordinator is responsible for the production of the Examination paper, including the gathering of questions from the individual examiners/auxiliary examiners, the writing of the rubric and all other matters related to the proper production of the Examination paper.

In the case of the Assessment of students' performance over a period (not assessed through a written Examination or written assignments), such as placements and other Study-Units involving the assessment of a number of students over a period, that does not render it possible or practicable for the members of a Board of Examiners to assess all the students concerned, the Board may appoint as many auxiliary examiners as necessary to participate in the Assessment; each student is to be assessed by at least two examiners, whether members of the Board of Examiners or auxiliary examiners. Individual examiners assess students according to the criteria set by the Board of Examiners to whom they shall be required to submit a report on each student. The Board of Examiners then may, at its discretion, examine or re-examine any student. The final decisions are taken by the Board of Examiners after having considered the reports of the individual examiners and provided that any student declared to have failed would have been seen by at least two of the members of the Board of Examiners, normally including the External Examiner if one is appointed.

In the case of a dissertation or a similar project, Senate appoints a Board of Examiners for each student. The Head of the Department concerned or his delegate is appointed chairman of the Board of Examiners. The chairman has the responsibility to ensure that appropriate Assessment criteria and procedures are used in the Assessment of dissertations.

54 Government of Malta, 2010, Education Act (Cap.327) University Assessment Regulations, 2009, Legal Notice 274 of 2009 – Malta Government Gazette No. 18,497 – 20 October 2009 And amended by: Legal Notice 353 of 2010 – Malta Government Gazette No. 18,620 – 16 July 2010, Legal Notice 399 of 2010 – Malta Government Gazette No. 18,637 – 27 August 2010, Legal Notice 472 of 2010 – Malta Government Gazette No. 18,665 – 2 November 2010

The Senate normally appoints External Examiners, either on a visiting or a non-visiting basis, for programmes of study in degree Courses. When appointed, External Examiners are to be members of each Board of Examiners of compulsory final year Study-Units of an undergraduate programme of study, or of a subject in a Non-Modular Course, and also members of the Award Classification Board of the Course that includes the programme of study for which they are appointed as External Examiners.

External Examiners, normally non-visiting, are appointed for the examination of any postgraduate dissertation, to which 30 ECTS credits or more are assigned. Visiting External Examiners are always appointed for the examination of doctoral students. Copies of the External Examiners' reports shall be kept at the Faculty and shall be made available for quality assurance purposes as well as to External Examiners appointed later.

It can be seen how the University of Malta has been working hard in order to increase its quality assurance procedures in the process of student assessment and fulfilling quality assurance standards as specified and emphasised within the Bologna Process.

4.3 Quality Assurance in other Higher Education Institutions

Other Higher Education institutions in Malta are also aware of the importance of quality assurance. This part of the chapter will review the Quality Assurance structures that are in place at MCAST and ITS.

Malta College of Arts, Science and Technology (MCAST)

The strategic plan of MCAST refers to quality assurance directly and stated that it aims to develope a single coherent internal quality assurance framework across all MCAST courses and providing, facilitating, and responding to external quality assurance. It puts forward the argument that MCAST can only ensure high level provision of education and training by taking internal and external quality assurance initiatives[55]. The Institute of Tourism Studies has also focused on quality assurance by signing a quality assurance policy under the responsibility of the Chairman.

The main quality assurance procedures within MCAST respond mainly to the demands of the BTEC qualifications for which many of the students at MCAST are prepared for. This requires that MCAST fulfils Edexcel's requirements to be an international centre for BTEC as well as for the BTEC courses that if offers. MCAST has been recognised as a Centre of Excellence by Edexcel for its outstanding performance in the delivery of vocational education and training[56]. Edexcel introduced this award to encourage centres to strive towards this status and enhance the quality of vocational education and training around the world. As an international centre of excellence, MCAST has joined an elite club, with only 5 other centres in the world having achieved this recognition.

Centres operating under the terms of the *Edexcel Licence Agreement* are responsible for allocating and remunerating their own external examiners for Higher Nationals. Two key processes which ensure the quality of BTEC qualifications are the use of **external** and **internal verification**.

Edexcel employs **External Verifiers (EVs)** to provide external quality assurance of all its qualifications. External Verifiers have two main roles; to ensure the conditions required for programme approval have been maintained and that all claims for certification are valid. The External Verifier visits an International centre twice a year and audits a sample of all learner evidence. BTEC centres must have systems in place that make sure the requirements of the qualification are being met and that all learner work meets the standards set out by the awarding body.

55 MCAST, 2006, Strategic Plan 2007-09: The Malta College of Arts, Science and Technology, a new era, a College with a clear focus Vocational Education and Training that supports the Changing Economy.

56 http://www.mcast.edu.mt/news_pressreleases_item.asp?ID=73

External verification[57] is the process by which Edexcel monitors the standards on all BTEC courses in every international centre. The external verifier will be a 'critical friend' to the centre, providing advice on ways in which the programme can be improved. A centre must meet the BTEC standards for each course before certification can take place and the external verifier will sample assessments to ensure that standards have been met.

Normally, two one day visits occur each year per subject area. External verification will need to allow for follow up work if remedial action is required by the External Verifier before certification can be allowed.

To quality assure the assessors' decisions; each centre must appoint an **Internal Verifier (IV)** who will usually be a staff member. The Internal Verifier's role is crucial to ensuring that all assessment decisions are accurate and fair and that they continue to be so throughout the year. The Senior Management Team should include a member with responsibilities for managing quality.[58]

Internal verification provides the validity of every BTEC certificate issued. Part of the Internal Verifier's role is to assure standards. This includes:

- validating assessors' judgements (including grading decisions) against the BTEC standards;
- ensuring consistent judgements across all the assessment team; as well as
- ensuring that learners have equality of opportunity.

The Internal Verifier is also responsible for reviewing all assignments, including practical tests and to check that the aims and outcomes relevant to the study-unit i.e. whether they are clear and easily understood by learners; whether they propose realistic timescales, and whether the assessment requirements are clear.

The Internal Verifier also maintains consistency throughout the year against qualification specifications means by establishing clear systems and processes for checking assessors' decisions. This can be achieved through three different ways: sampling assessment decisions where samples of all types of assessment are taken for moderation; monitoring assessment practice to ensure that all procedures are followed; standardising assessment judgements; ensuring that learners' needs and equal opportunities are respected; and manages assessment resources. The Internal Verifier also manages the quality of programme delivery to ensure assessment resources, including personnel, are effectively deployed and to provide a link between the centre and Edexcel.

The Internal Verifier has to be *an integral part* of the organisation's quality procedures and manuals and reports directly to the Quality Manager of their organisation on all aspects of the centre's BTEC programme. The Internal Verifier also acts as a link between the centre and Edexcel.

MCAST has appointed a person as Director Quality Assurance and who is the Quality Assurance nominee responsible to foresee the overall quality assurance policies across MCAST. The nomination of the internal verifier for the different BTEC courses falls under the responsibility of the Directors of the different institutes. Due to the demand that the BTEC processes make, the logistics and implementation fall within the responsibility of the deputy director. There is insistence that all processes are recorded and that all the standards as set by Edexcel are respected. Different courses tend to have different internal verifiers due to the nature of the content of the courses. When Edexcel sends its external verifiers, it has the freedom to choose in which area of expertise and what recorded data and processes to check. There are usually two annual visits from an external verifier to MCAST[59].

57 Edexcel, BTEC International, Signposts to quality.
58 Edexcel, BTEC International Internal Verification A Guide for Edexcel International Centres.
59 Information obtained from the Quality Assurance nominee at MCAST.

Institute of Tourism Studies (ITS)

It is the Institute's mission to be *the highest quality provider of vocational education*[60]. The Quality Assurance Manual developed by the institute reflects its commitment to ensuring effective vocational education. In order to achieve this, ITS has been working on developing policies and procedures for monitoring and improving quality. The areas targeted include: curriculum monitoring and review; internal validation; operational guides; student feedback; and complaints handling.

The Director of Tourism and the Director General are responsible for establishing a quality culture. However, the strategy developed includes participation of all the staff as well as other stakeholders, among them the students themselves.

The system adopted involves a periodic performance review and self-assessment. Focus is on: the institute and its mission; teaching and learning; students' achievements; curriculum content, organisation and management; student support; resources; quality assurance; and management. An Internal Audit Quality team is responsible for inspecting areas and procedures, and ensuring that systems are in place and in use.

The Programme Review Board (PRB) is responsible for gathering data on the operation of the course, student feedback and performance. Together with the Governors' Advisory Sub-committees, it is responsible for ensuring appropriate consultation with industry. The PRB is responsible for producing three reports, one at the beginning of the academic year, one in February/March and one at the end of the academic year. Programme validation falls under the responsibility of the Director General who gives internal approval. Changes are dealt with by the PRB and the Deputy Director, before they are submitted to the Director General. Procedures for student appeal are included as an annex to the Quality Assurance Manual.

The Institute Strategic Plan is produced by the Director General and approved by the Board and covers a three year period. Progress in the standards identified are monitored through the use of specific performance indicators which are: achievement of budgetary targets; student number trends; student continuation; learning goals and qualifications; attainment of external awards; operational plan achievement; student progression; external verification; complaint handling; and student surveys.

Standards for Teaching and the Promotion of Learning focus on aspects of: team co-ordination; team membership; professionalism; teaching style and practice; measuring student achievement; student/staff relationships; and pastoral/guidance role.

The Quality Assurance Manual involves a number of appendices: Guidance on Course Team Meetings; Role of Programme Review Board; Implementation of the Student Surveys; Academic Appeals Procedure; Training and Development; Appraisal Policy; Programme Portfolios; Learning Resources Policy; and the Learning Agreement.

The implementation of these Quality Assurance measures are at the heart of the Institute as it strives to provide the best training to its students and to supply the local tourism industry with the required labour force.

4.4 Conclusion

This chapter has outlined recent developments in quality assurance procedures across the main Higher Education Institutions in Malta, as well as developments in national legislation. It is evident that government's vision of establishing Malta as a Centre of Excellence by 2015 and the Bologna Process have been instrumental in improving regulation provisions on a national level, as well as made Higher Education institutions aware of the need to improve their quality assurance procedures in order to face the challenges that the European Higher Education Area brings with it.

60 Institute of Tourism Studies, (n.d.), Quality Assurance Manual.

Chapter 5:
Promoting student mobility in Higher Education

5. 0 Introduction

Mobility of staff and students within an established European Higher Education Area has been part of the Bologna Process from the beginning. The Bologna Declaration included *promoting mobility by overcoming obstacles* as one of the aims of the process. The focus on mobility is related to the experiences in mobility that had already been achieved within the ERASMUS exchange programme. A lot of work has been done to promote exchange of staff and students. However, it is also recognised that there are still a number of obstacles towards acheiving the level of mobility which is considered desirable within the European Higher Education Area.

There are currently three Higher Education institutions: the University of Malta, the Malta College of Arts, Science and Technology (MCAST) and the Institute of Tourism Studies (ITS); participating in ERASMUS mobility. The largest number of students and staff taking up opportunities for exchange come from the University of Malta. MCAST started participating in 2005 while ITS started participating in 2006.

The European Union has also other programmes which aim to increase cooperation as well as mobility between the European Union and third countries. These education and training activities complement the EU's internal programmes and promote EU policies. The four objectives in external education and training actions include: supporting partner countries outside the EU in modernisation efforts; promoting common values and closer understanding between peoples and cultures; advancing the EU as a worldwide centre of excellence in education and training, which also contributes to Europe's prosperity and economic growth; and improving the quality of services and human resources in the EU through mutual learning, comparison and exchange of good practice[61].

The European Commission implements a number of international co-operation programmes in higher education in the fields of education and training, namely:

- **Erasmus Mundus** which is a co-operation and mobility programme in the field of higher education promoting the European Union as a centre of excellence in learning to the rest of the world and supports top-quality European master's courses. This external cooperation promotes partnerships between EU and third countries' universities to develop student and scholar exchanges;
- **Joint Study programmes:** This programme promoted co-operation with industrialised countries enhancing the quality of higher education and vocational
- education and training and promoting intercultural understanding, mainly through joint study programmes;
- **Jean Monnet**: This Programme promotes the teaching of and research into European integration as a subject at universities;
- **Tempus**: This programme contributes to building an area of co-operation in the field of Higher Education involving the Universities from the European Union and partner countries in the surrounding area.
- **Edulink** fosters capacity building and regional integration in Higher Education in ACP (African, Caribbean and Pacific) States and Regions, and promotes Higher Education as a means of reducing poverty
- **Alfa** is a programme of co-operation between Higher Education Institutions of the European Union and Latin America[62].

61 Information extracted from http://ec.europa.eu/education/external-relation-programmes/doc1172_en.htm
62 Information extracted from http://ec.europa.eu/education/external-relation-programmes/doc1172_en.htm

Even the University of Malta promotes exchanges outside the European Union and also participates in student exchange programmes with Universities in Australia, Canada, Japan and the USA. Through its membership in the Utrecht Network Exchange, the University of Malta also participates in student exchanges with the Mid-American Universities International (MAUI) and the Australian-European Network (AEN). The University of Malta is also a member of the International Student Exchange Program (ISEP)[63].

This chapter will look at the trends in staff and student mobility, mainly but not only at the University of Malta within the ERASMUS programme in recent years. It will also highlight the main problems and obstacles which University of Malta students face in trying to organise their studies in order to go on an ERASMUS exchange.

5.1 Some trends in ERASMUS mobility

The University of Malta (UoM) has been involved in the ERASMUS exchange programme since 2000. Since then, the number of staff and students taking up such an experience has gradually increased.

Statistics show that the number of students going on an ERASMUS exchange programme has increased. Having said this, the percentage of UoM students going on exchange programmes is still limited compared to the total number of students at the University of Malta. In addition, in 2007-8, students could apply to go on a placement. In the first year, all students participating were from the Pharmacy course.

England and Italy are the countries mostly visited by Maltese students during exchange programmes. England is the students' first choice mainly due to the language of instruction. In the case of Italy, there are many students who can communicate well in Italian. The ERASMUS coordinator at the European and International office (UoM) stated that many Law students tend to prefer to go to Italy as the Italian law is similar to the Maltese one.

Table 5.1: Number of University of Malta students going on ERASMUS exchange per year

Year	Number of students on an ERASMUS period of study	Number of students on an ERASMUS work placement
2000-1	92	-
2001-2	129	-
2002-3	72	-
2003-4	119	-
2004-5	130	-
2005-6	149	-
2006-7	124	-
2007-8	105	9
2008-9	135	7

A number of Faculties at the University of Malta have identified the year and semester when it would be best for students to go on an ERASMUS exchange. For example, in the case of Law students, students tend to go in the first semester of the sixth year. This is preferred as students would be doing their disseration during this period, therefore it would not be difficult to overcome problems related to module choice since most of the work involves research studies for their dissertation. Students from the Institute of Health Care also have a specific year and period identified. At the Faculty of Education, students go on an exchange when they do not have teaching practice. The Faculty of Arts prefers the second year of studies. In the latter case, most of the students studying a language spend one semester in the country of the language studied.

63 Information etracted from http://www.um.edu.mt/int-eu/intexchanges

The coordination of the learning agreement is tackled in different ways in the various faculties. Some faculties have one academic member of staff appointed as the ERASMUS coordinator. This person is responsible to help and guide students to work out their learning programme to follow at the host University as well as ensure that all the academic programme requirements of the course that they are following are fulfilled. In other Faculties, this responsibility is taken up by the Head of Department or the subject Coordinator.

Table 5.2: University of Malta academics on Erasmus mobility selected per year

Year	UoM	MCAST	ITS
2000-1	22	-	-
2001-2	44	-	-
2002-3	33	-	-
2003-4	34	-	-
2004-5	57	-	-
2005-6	59	-	-
2006-7	52	-	4
2007-8	38	2	7
2008-9	37	5	8

The participation of academic staff in ERASMUS exchange programmes has also grown since its start as more staff members have participated in the past years. The duration of such exchanges is much shorter and is usually around 5-7 days. The preferred countries visited also tend to be England and Italy which reflect the cultural affinity of these countries with Malta. The faculties which tend to have high participation of staff in exchanges also tend to have a high participation rate in ERASMUS exchanges amongst students.

The National Agency (European Union Programmes Agency – EUPA) has in recent years implemented new procedures for all Higher Education Institutions in Malta for the selection of applicants as well as the allocation of grants. There have been changes in the types of exchanges that students may be interested to participate in. There has also been an extension of the ERASMUS programme to administrative staff that had the opportunity to apply for ERASMUS exchange programmes.

In 2008 a national ERASMUS Committee was set up for each institution involved in the programme. This committee includes representatives from Higher Education Institutions' administrative staff coordinating the exchange, academic staff, person/s responsible for ERASMUS at the National Agency as well as a student representative. This committee is responsible for overseeing the selection of staff and students applying for an exchange, the allocation of grants, as well as other matters related to the implementation of the ERASMUS programme. All applications submitted for an ERASMUS exchange are evaluated by two independent evaluators and depending on the evaluation results, students, staff, as well as for the call for administrative staff, are ranked in order. The committee then approves the list as well as decides on the grant allocation to be provided. Since 2008 applicants, have had the possibility to go on a placement rather than to another Higher Education Institution. This meant that mobility would not only be between Higher Education Institutions, but also between Higher Education Institutions and the industry.

Following Malta's suspension from the LLP and Youth programme, the government has set up the Direct Exchange Programme which supports students wanting to spend a study period abroad.

5.2 Obstacles to ERASMUS student mobility

In 2008, mobility was the main focus of discussion in a speech[64] by the former president of the Pancyprian Federation of Students' Unions (POFEN). Issues raised included problems with recognition, comparability and language of tuition. It was argued that these aspects must be addressed in order to make the exchange period genuinely meaningful for both the individual and the institution. There were other problems in access to mobility, such as financial difficulties, administration obstacles and lack of clear information. It was also pointed out that social services in the host country were not always accessible to all mobile students.

Students at the University of Malta still experience a number of obstacles to participation in ERASMUS or Direct exchange. Through discussion (done in 2008) with the University of Malta ERASMUS coordinator at the European and International Office and a few students, as well as consulting studies carried out by University Students' Council (KSU), the obstacles identified were the following:

- **Organising the Learning Programme**: The learning agreement is a very important aspect of an ERASMUS study exchange as it is the document which lists the modules that students will follow when they go on an ERASMUS study exchange. The students need to identify the modules that they want to follow, and ensure that they cover the work which they would otherwise have to do had they remained in their home country. The Registrar's office has in the past years introduced an additional document which students need to present to the Faculty Office prior to going abroad. This document includes all the modules that the student would be doing at the University of Malta as well as the other units which would be done at the host University. In total, the students needs to complete 60 ECTS per accademic year. The main problems which students encounter depend on the degree of flexibility being applied by the different Faculties. In some Faculties, and particularly some coordinators within Faculties are flexible because they do not expect the student to follow the exact same modules as if s/he never went on an exchange programme. This enables students to put together a good learning programme which is diverse but also similar, in areas of study, to what they need to fulfil during the course. The result of such attitude can be observed from the greater number of students who go on an exchange programme such as the case of the Physical Education students at the University of Malta. In other situations, however, students are expected to follow exactly the same units and credits as they would have in Malta. In some instances, the individual tutors read the alternative units to be followed and check for degree of match. Such a rigid and strict approach makes it very difficult to put together a programme as Universities are different and it is difficult to find other Universities with identical course structures. In addition, it is not in the spirit of an ERASMUS exchange to go to another University and to follow the exact same subjects. However, the latter approach places great stress on students, many of whom give up due to fear that they may be asked to repeat the credits on their return;

- **Language barriers**: Many of the students are limited in the selection of areas and countries that they can go for an ERASMUS exchange due to language barriers. It is usual for students at the University of Malta to try and look for exchanges in an English speaking University. This usually limits them mainly to England and Ireland. Although there are more Universities across Europe who are offering courses in English targeting specifically ERASMUS students, local students then face problems in matching courses as stipulated in the learning agreement. This means that students can go mainly to England, Ireland and Italy. Students who tend to go to other European countries such as France tend to be language students who would be studying the language as part of their tertiary studies;

64 Paris A. Constantinou , Former President of the Pancyprian Federation of Students' Unions (POFEN), April 2008, Mobility of Students, Researchers and University Educators, at the Conference Modernisation of European Universities: Challenges for Small Countries, held in Nicosia, Cyprus.

- **Coping with administrative procedures**: Many times, University students are not aware that it is their responsibility to manage their learning agreement. It is a common expectation to believe that once they have been accepted to go on an exchange, that all they need to do is to turn up at the host University and that all the administrative arrangements have been done for them. The system holds the students responsible for making sure that they fulfil their study requirements. As already discussed above, this process can be tedious and requires a high degree of energy and input from students. Unfortunately, due to the many bureaucratic issues involved in the exchange, many students simply give up and do not go on an exchange programme;

- **Financial Aspects**: Even if students receive an ERASMUS grant which covers the travel costs as well as subsistence for living costs during the exchange period, on top of the regular stipend, a number of students are discouraged as they realise that they need to fork out some of their own money just the same in order to go on an exchange. This may be due to two reasons. One is that students are used to having enough money provided for their studies and related expenses whereas in an ERASMUS exchange they have to invest some of their own money, and they may not be ready to do this. The other reason is that there may really be students who due to their socio-economic background, despite the ERASMUS subsidy and the stipend, still cannot find the additional money needed to go on an exchange programme. This situation shows how there is no means of helping students pertaining to disadvantaged groups whose financial situation may make it impossible to take up such opportunities. It also shows the need to help students appreciate the value of investing in their own personal and professional development.

To sum up, the main barriers which students face in being able to go on an ERASMUS exchange are various. Some are institutional; developing the learning agreement and fulfil all the bureaucratic procedures. Others are of a financial nature. In addition, students need to understand that they have to take the initiative and make that extra effort to organise their exchange rather than expect everything to happen automatically.

There were also a number of problems which students encountered during and on their return back from their exchange. These were various and related to credits as well as financial aspects. The problems raised with the University Students' Council (KSU) included the following:

- Some students were asked to redo a number of units which they had missed during the exchange, at times also without any assessment. A number of students, on their return from their studies had to do extra units. This put a great academic burden on the students who had to face very heavy study loads. In addition, one student pointed out that due to synoptic exams, students still had to learn the contents of the units regularly taking place in Malta in order to prepare for the final examination. At times students faced situations where they risked repeating an academic year due to the problems arising on their return;

- Some students complained that it took a long time to receive their financial allowance. Many of the students often have very tight budgets and so they would need to receive the subsistence at the earliest possible. Many times, they have to wait quite some time to receive the funds and this issue added unnecessary financial difficulties.

In view of all the problems mentioned, a number of recommendations have been put forward:

- The European Office at the University of Malta needs to better inform students of the procedures and paperwork which needs to be prepared by the students before they leave on an ERASMUS exchange. Although such initiatives have already been taken, it would help if students are provided with flow charts/guidelines of all the things that they need to do before they leave. These guidelines should be available for download from the University website;

- The University of Malta needs to encourage Faculties to be more flexible regarding study pathways in order to facilitate student exchanges. The practice of consulting each and every course tutor would make the task extremely difficult as well as allow individual members of staff to hold students from taking up such opportunities. The University should thus seek to promote flexibility. It should remove any requirement to seek the approval of all tutors where this exists and to consider either having the responsibility to rest with the ERASMUS coordinator or at the Heads of Department/Coordinators' level;

- It is important for University practice to ensure that students going on an ERASMUS exchange do not suffer due to their experience and that flexible solutions are necessary at times. It is very important to try and trash out potential problems with the programme of studies before leaving for the exchange rather than having to face them upon their return;

- The National Agency (EUPA), in collaboration with the European and International Office at the University of Malta, can work together to promote mobility. Initiatives should target both students as well as Faculty members responsible for overseeing the exchange process.

With respect to staff mobility, it is to be noted that there are no problems with the organisation of exchanges. However, there is a tendency for the same staff to take up such opportunities regularly while others do not seem to be interested. The challenge is thus to promote the use of such funds and opportunities by a wider range of academics within the University of Malta such that all University academic staff are involved in this aspect of the University's international dimension. In addition, with the opportunity to apply for placements in industry, it would help both students and staff to experience work related experiences first hand.

5.3 Conclusion

This chapter has reviewed the trends in ERASMUS exchange at the University of Malta. It has shown how the number of academic staff and students taking up such opportunities are increasing. However, there are still a number of obstacles which persist. In the case of academic staff, there is a need to have a greater distribution of grants. In the case of students, the learning agreement, language, financial demand as well as bureaucracy still pose a great burden and often it is only those who are perseverant and persistent manage to eventually go on an ERASMUS exchange. Mobility should be a feature enshrined in every programme of studies adequately supported both within the Faculty and within the administrative structures of Higher Education Institutions.

Chapter 6:
Measuring Research and Development

6. 0 Introduction

Malta, despite its small size, competes with other countries within a global economy. This makes investment in research and development a very important aspect of the local economy. Initiatives have been taken to work towards improving the country's research capabilities and the research system. Tertiary education in Malta has a significant contribution to make, both in research production as well as in terms of training researchers for the local industry.

This chapter will review relevant data and literature about the state of research and development in Malta and will seek to extract from such data the role and contribution of Higher Education.

6.1 Defining Research and Development

Understanding the concept of Research and Development is not clear cut, as it involves different activities and tends to be measured in different ways. The main reference used for measuring performance in Research and Development is the Frascati Manual[65], which is also the main tool used for compiling the innovation scoreboard by Eurostat.

The Frascati Manual defines Research and Experimental Development (R & D) as *creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.* The manual specifies how the term R & D covers three activities:

- ***Basic research:*** experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view;
- ***Applied research***: original investigation undertaken in order to acquire new knowledge which is directed primarily towards a specific practical aim or objective; and
- ***Experimental development***: systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, installing new processes, systems and services, or improving substantially those already produced or installed.

Research and Development cannot be measured directly. Therefore, indicators related to its activity are taken into consideration. These include:

- **Input Indicators:** Two inputs are measured: R & D expenditures and R & D personnel. Both inputs are normally measured on an annual basis. Data on the utilisation of scientific and technical personnel provide concrete measurements for international comparisons of resources devoted to R & D spent during a year, and so many person-years used during a year. The basic measure for R & D expenditure is "intramural expenditures"; *i.e.* all expenditures for R & D performed within a statistical unit or sector of the economy as well as "extramural expenditures", which covers payments for R & D performed outside the statistical unit or sector of the economy. For R & D purposes, both current costs and capital expenditures are measured;
- **Output indicators**: The output of R & D or Science and Technology (S & T) are difficult to achieve and in general can be measured in several ways. Innovation surveys are one attempt

65 OECD, 2002, Frascati Manual: proposed standard practice for research and experimental development.

to measure outputs and the effects of the innovation process in which R & D plays an important role. Another option is to use existing data sources. Manuals on the technology balance of payments and on the use of patents as S & T indicators have been published as well as on bibliometrics and on the analysis of trade data in terms of the "technology intensity" of the products or industries concerned.

The relationship between inputs and outputs in Research and Development are shown in the diagram below.

Fig. 6.1 Representation of Research & Development Indicators[66]

6.2 A Historical perspective of Research and Innovation

In December 2007, the Malta's Prime Minister, contributed to the document[67] collated as an initiative of the Portuguese presidency for presentation to the Council of the European Union, entitled *Malta's research and innovation system in transition.*

This contribution provides a historical account of the developments in the policy for Research and Innovation in Malta. This section includes the main highlights of the document presented providing insight to the initiatives taken by government to promote research for innovation.

The first efforts to launch a science and technology policy dates back to 1989 with the setting up of the Malta Council for Science and Technology (MCST) to support research through networks in ICT, water, marine sciences, energy, and industrial applications. The major contributions of MCST were the National Strategy for Information Technology and the National Science and Technology Policy Document.

One major improvement was the participation of Maltese researchers in the EU's international cooperation programmes, including Avicenne and INCO under the Framework Programmes. Malta's high *per capita* participation in FP5 and FP6 is a clear indication that researchers were still able to attract EU funding and to join EU research consortia despite constraints of size, lack of critical mass, limited national funding and support structures.

The national Research, Technological Development and Innovation (RTDI) Programme which started in 2003/4 was a response to the challenges of the Lisbon Agenda together with a growing need to address national research priorities. The National RTDI Programme encourages investment in research and innovation activity to comply with the 3% Lisbon and Barcelona targets[68].

On the Prime Minister's request to review the research and innovation sector, R & D policy instruments have undergone a major transformation in the period 2005/6. In October 2005, the Prime Minister

66 UNESCO, Measuring Research and Experimental Development, Statistical Capacity Building Workshops UNESCO Institute for Statistics.

67 Gago, José Mariano (ed.), December 2007, The Future of Science and Technology in Europe: setting the Lisbon Agenda on track, Ministério da Ciência, Tecnologia e Ensino Superior Estrada das Laranjeiras, Lisboa.

68 http://www.mcst.gov.mt/

announced a higher profile for the Malta Council for Science and Technology (MCST). In 2006, an Intra-Governmental Committee for Research and Innovation was set up to formulate joined-up policies on Research and Innovation, attain congruency of Research and Innovation aims, and to communicate and share information.

The National Strategic Plan for Research and Innovation approved by Cabinet in 2006 helped to forge important links between key players and strengthen policy and research capacities at all levels. The Malta Council for Science and Technology was assigned the role to ensure more coordinated and coherent policy approaches in research and innovation across Government Ministries and agencies to harness synergies and avoid duplication of effort. MCST's new remit was as a catalyst in defining and facilitating the role of research and innovation activity as a support to Ministerial policies and sectoral strategies and to prioritise and orient national RTDI investments, public and where possible private, to sectors and niche areas with high business potential and relevance to meet pressing economic and social needs. The new Strategic Plan for R & I (2007-2010) reflects the drive to leverage State R & I funding to address national priorities relating to water, energy and the environment, whilst selecting a number of value-added economic sectors. This plan provided the roadmap for a long-term vision and introduced changes in R & D policy rationales targeting particular priority areas and a strong business orientation. It promoted the use of indicators and benchmarks and collaboration with the National Statistics Office as a result of the efforts of Malta Enterprise.

The National Strategic Plan for R & I (2007-2010) sets out a vision for **"***Research and Innovation at the heart of the Maltese economy to spur value-added growth and wealth",* The National Strategic Plan for R & I (2007-2010) set a number of targets based on performance indicators relating to (a) the SET Human Capital Base; (b) Future R & I Capacity; (c) R & I Progress and Performance; (d) Industry-Academia Collaboration; (e) Current R & I Capacity; (f) Imported Know-How; (g) Growth and Wealth Creation; and (h) Funding Sources for R & I in Business, Higher Education and Government. The plan targets to increase R & D investments to 3% of GDP, with private sector spend accounting for 2%. Measures include the dedication of a substantial proportion of EU Structural Funds for R & I (2007-2013) with research funding and scholarships and fellowship schemes targeting the four areas of national priority (environment and energy, ICT, biotech/health and value-added manufacturing). The amount of funds made available under the RTDI programme was:

- 2004 – €700,000 financing 15 projects;
- 2006 – €930,000 financing 7 projects;
- 2008 – €700,000 financing 7 projects;
- 2009 - €300,000 financing 3 projects;
- 2010 - €700,000 financing 5 projects.

6.3 Malta and the Innovation Scoreboard

As a member of the European Union, Malta participates in data collection for comparison in performance across the member states. The Innovation Scoreboard compiled by Eurostat is one means of obtaining information on the degree of research and innovation in the different countries. A memo issued in February 2011[69], presents the innovation performance calculated on the basis of 25 indicators covering five dimensions of innovation:

- **Innovation drivers:** the structural conditions required for innovation potential;
- **Knowledge creation:** the investments in R & D activities;
- **Innovation & entrepreneurship:** efforts towards innovation at the firm level;
- **Applications**: labour and business activities and their value added in innovative sectors; and
- **Intellectual property**: achieved results in terms of successful know-how.

69 Eurostat, MEMO/11/56, Brussels, 1st February 20011, The Innovation Union Scoreboard 20011: Monitoring the innovation performance of the 27 EU Member States.

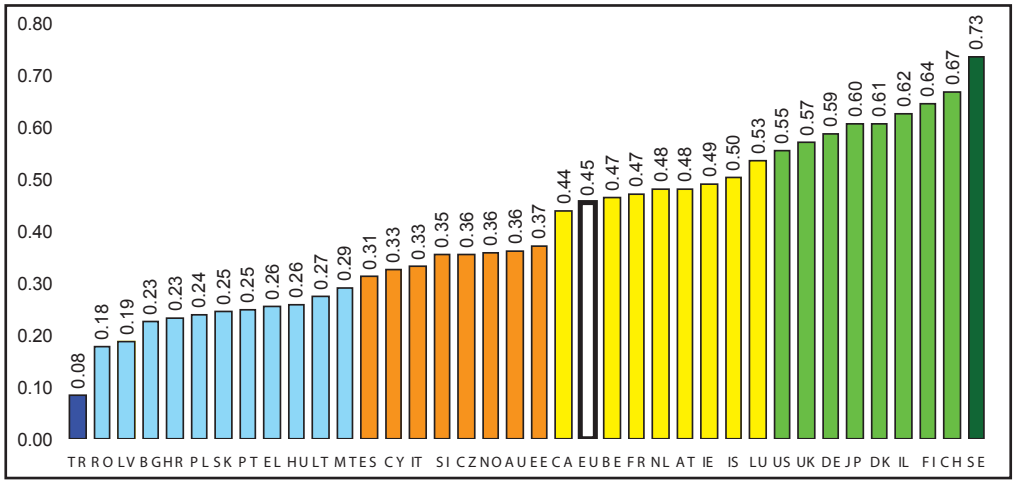
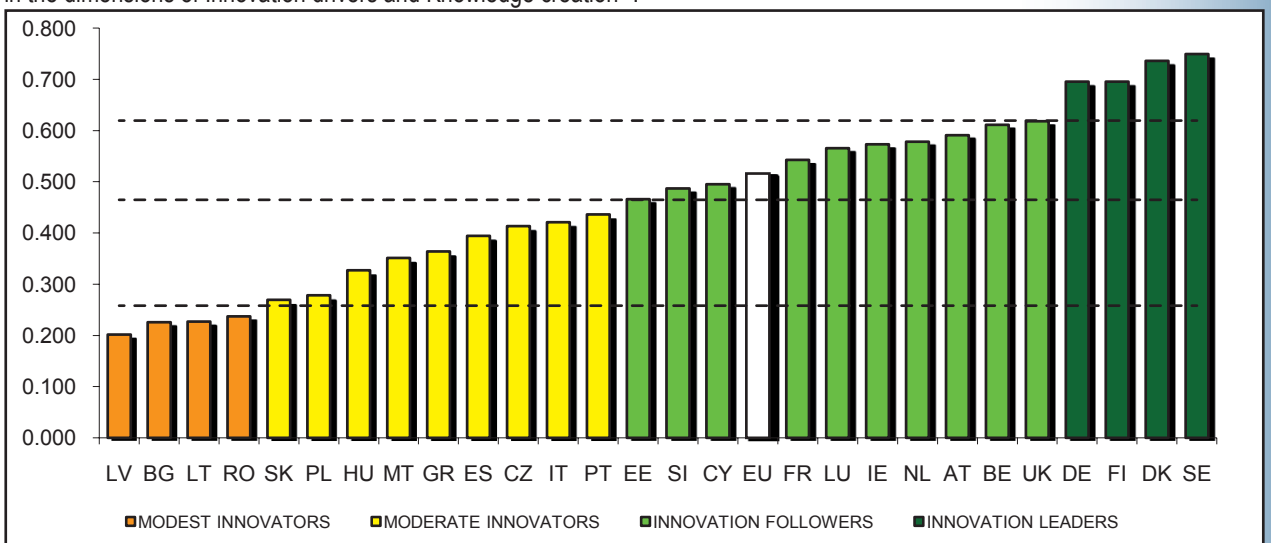


Fig. 6.2: Overall Innovation Performance: the EIS Summary Innovation Index 2007[70]

Based on performance over a five year period, four main groupings of countries emerged. Malta was classified with the catching-up countries. Although scores were significantly below the EU average, they are increasing towards the EU average. Malta's position at 0.29 is significantly lower than the average that stood at 0.45. It was noted that Malta's innovation performance has been increasing in the last five years and if this trend continues it would reach the average EU level of performance in around 20 years. Malta performed particularly strong in the dimension of applications where it was the leading EU country, and where it performed well above EU average on the indicators of exports of high-technology products, sales of new-to-market products and sales of new-to-firm products. It performed at a relatively lower level in the dimensions of Innovation drivers and Knowledge creation[71].



Note: Average performance is measured using a composite indicator building on data for 24 indicators going from a lowest possible performance of 0 to a maximum possible performance of 1. Average performance in 2010 reflects performance in 2008/2009 due to a lag in data availability.

The performance of Innovation leaders is 20% or more above that of the EU27; of Innovation followers it is less than 20% above but more than 10% below that of the EU27; of Moderate innovators it is less than 10% below but more than 50% below that of the EU27; and for Modest innovators it is below 50% that of the EU27.

Figure 6.3 Overall Innovation Performances: the EIS Summary Innovation Index 2010

70/71 Eurostat, MEMO/08/87, Brussels, 14th February 2008, European Innovation Scoreboard 2007: Summary of the situation in the 27 Member States.

The main findings of the IUS 2010[72] are based on the average innovation performance across 24 indicators. The Member States fall into **four performance groups**: Innovation leaders; Innovation followers; Moderate innovators and Modest innovators. Denmark, Finland, Germany and Sweden feature a performance well above that of the EU27. These countries are the **Innovation leaders**. Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands, Slovenia and the UK all show a performance close to that of the EU27. These countries are the **Innovation followers**. The performance of Czech Republic, Greece, Hungary, Italy, Malta, Poland, Portugal, Slovakia and Spain is below that of the EU27. These countries are the **Moderate innovators**. The performance of Bulgaria, Latvia, Lithuania and Romania is well below that of the EU27. These countries are the **Modest innovators**. Malta, together with Bulgaria, Estonia, Romania, Portugal and Slovenia are the growth leaders with an average annual growth rate well above 5%.

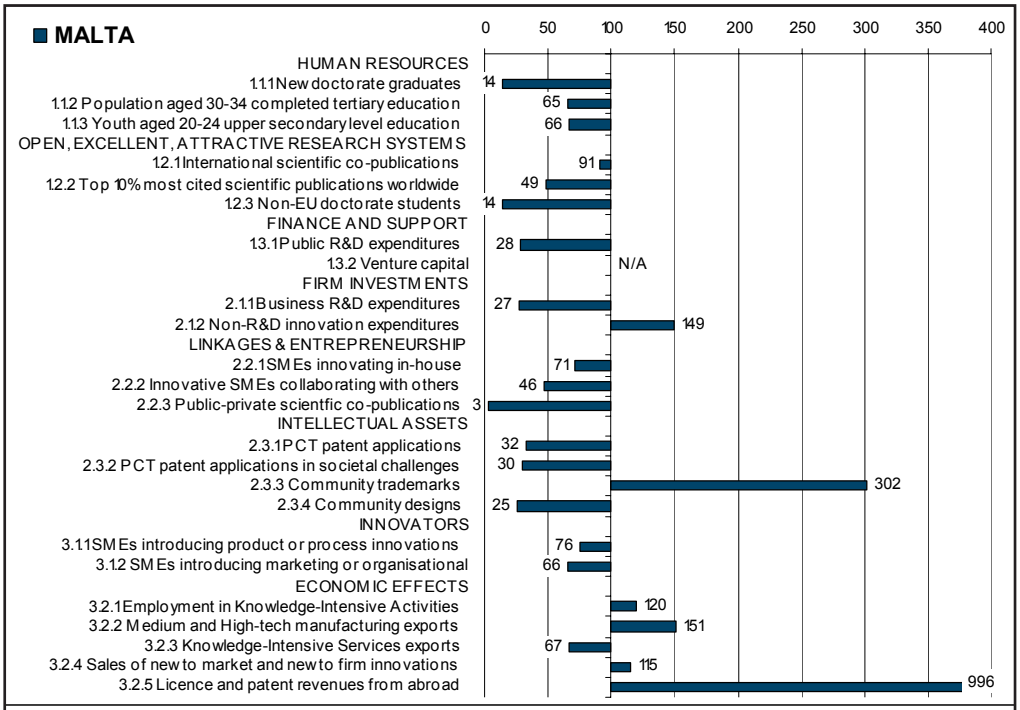


Figure 6.4 Specific Indicators achieved by Malta compared to EU 27

Malta is below average in most of the indicators compared to the EU27. It is only in a small number of indicators that Malta has performed better. The indicator with the highest increase in performance rates relates to the licence and patent revenues from abroad; and community trademarks. Malta also performed better on non R & D innovation expenditure and medium and high-tech manufacturing exports.

Malta was classified as one of the moderate innovators with a below average performance. Relative strengths were in open, excellent and attractive research systems and intellectual assets. Relative weaknesses were human resources, open, excellent and attractive research systems, finance and support, linkages and entrepreneurship and innovators.

72 Maastricht Economic and social Research and training centre on Innovation and Technology (UNU-MERIT) with the contribution of DG JRC G3 of the European Commission, 2011, **Innovation Union Scoreboard 2010** The Innovation Union's performance scoreboard for Research and Innovation, Pro Inno Europe.

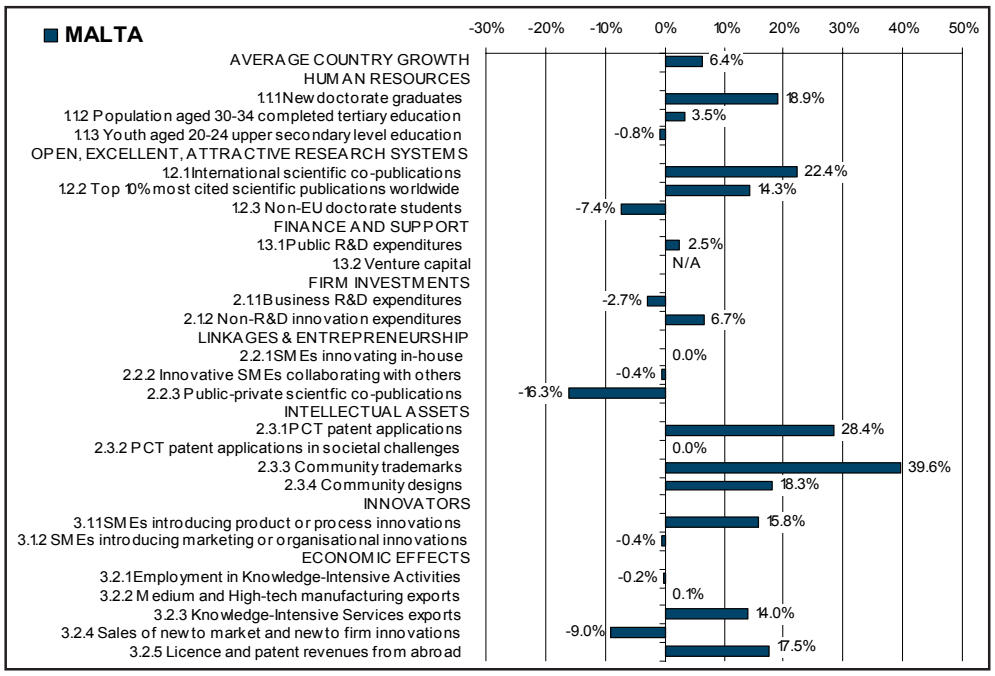


Figure 6.5: Annual Growth per indicator[73]

Specific data on the innovation scoreboard

The most recent data for Malta with respect to Research and Development can be obtained from the innovation scoreboard published by Eurostat. The method followed for the collection of data is that described in the Frascati manual.

The first two tables below compare the values obtained for Malta with the EU average on indicators of input into Research and Development: expenditure as well as personnel. Further breakdown of this data is provided in the tables which follow.

Table 6.1: Research and Development Expenditure, by sectors of performance; All sectors- % of GDP[74]

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	1.83[s]	1.86[s]	1.86[s]	1.87[s]	1.86[s]	1.83[s]	1.82[s]	1.85[s]	1.85[s]	1.92[s]	2.01[s]
Malta	:	:	:	0.26	0.26	0.53[b]	0.56	0.61	0.58[p]	0.57	0.54

(:) Incomplete data (s) Eurostat estimate (p) Provisional value (b) Break in series

It can be seen that the % GDP devoted by all sectors to research and development expenditure is much less than that for the EU average and far off from the Lisbon targets. This shows that Malta still has a long way to go in terms of investment in R & D and more efforts need to be done. Having said this, Malta has shown a steady increase between 2004 and 2006 which has levelled since then.

73 Maastricht Economic and social Research and training centre on Innovation and Technology (UNU-MERIT) with the contribution of DG JRC G3 of the European Commision, 2011, INNOVATION UNION SCOREBOARD 2010. The Innovation Union's performance scoreboard for Research and Innovation, Pro Inno Europe pg 40.

74 Adapted from http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsc00001

Table 6.2: Share of research and development personnel, by sectors of performance; all sectors - Head count (% of the labour force)[75]

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	:	:	0.9[s]	0.91[s]	0.92[s]	0.92[s]	0.93[s]	0.95[s]	0.98[s]	1[s]	1.04[s]	1.07[s]
Malta	:	:	0.3	0.26	0.45[b]	0.52	0.53	0.52[p]	0.53[p]	0.3	0.26	0.51

(s) Eurostat estimate (b) Break in series (p) Provisional Value

A similar trend can be observed in terms of Research and Development Personnel. There has also been an increase but this was small and has levelled off in 2006 and remaining steady till 2009.

Table 6.3: Total researchers (FTE), by sectors of performance; All sectors-FTE: full-time equivalent[76]

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	1162093[s]	1206675[s]	1251737[s]	1297144[s]	1368800[s]	1458364[s]	1451653[s]	1515516[s]	1584880[s]
Malta	:	272	276	436[b]	479	521	496	546	485

(s) Eurostat estimate (b) Break in series

The number of full-time researchers in Malta is still low when compared to that of the European Union. However, there has been a substantial increase, particularly in 2004 regarding the number of researchers for Malta. This number has been increasing gradually ever since.

Table 6.4: Share of women researchers, by sectors of performance; all sectors -Head count (% of total researchers)[77]

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	:	28[s]	30[s]	30.3[s]	30.4[s]	30.6[s]	31.1[s]	31.2[s]	32[s]	32.1	:
Malta	:	:	:	:	:	23.6[b]	26.2	26.1	25.4	27.9	:

(s)Eurostat estimate (b) Break in series

There is not much difference in the percentage of women in research and development compared with the EU average, being only 5-7% higher than that for Malta. This, however, does not necessarily mean that Malta is doing extraordinarily well, but rather that the overall presence of women researchers across Europe is low.

Table 6.5: Share of government budget appropriations or outlays for research and development (% of General Government Development)[78]

Country	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	1.6(s)	1.58(s)	1.52(s)	1.51(s)	1.47(s)	1.49(s)	1.47(s)	1.48(s)
Malta	:	:	0.4[b]	0.43	0.37	0.35	0.35	0.39[p]

(s) Eurostat estimate (b) Break in series (p) Provisional Value

The share of government funding for research and development in Malta is much lower than that for the

75 http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsc00002
76 http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsc00004
77 http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsc00005
78 http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gba_nabste&lang=en

EU average. This means that there is not enough government funding in R & D. This is the reason for which government has in the past years taken on investment in innovation and this is also reflected in the increase in figures in the past few years, despite the still comparatively low value.

Table 6.6: Human resources in science and technology as a share of labour force - Total; (%)[79]

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27)	34.0	34.5	35.0	35.9	37.0	37.8	38.6	39.2	39.6	40.1
Malta	28.2	28.0	25.9	27.4	28.4[b]	29.9	30.4[b]	31.9	32.1	32.3

(b) Break in series

The percentage of human resources in science and technology in Malta are not that far off from the EU average values. Having said this, however, it is to be noted that the rate of growth for Malta has been less than the EU average which means that Malta is falling behind. Action thus needs to be taken.

In having some insight into where human resources are found, a newsletter issued by Eurostat[80], shows how the input in the full-time equivalent personnel for Research and Development is divided more or less equally between business and Higher Education. This shows how the University of Malta is contributing to R & D through its personnel.

Table 6.7: R & D personnel in full-time equivalent (FTE) in 2006 and annual average growth rate 2001-2006, EU-27 and selected countries[81]

	Total		Business Enterprises		Government		Higher Education		Private non-profit	
	FTE	AAGR 2001-6	FTE	AAGR 2001-6	FTE	AAGR 2001-6	FTE	AAGR 2001-6	FTE	AAGR 2001-6
EU-27	2167281	2	1155669	2	330451	1	654955	2	26305	5
Malta	752[p]	12.2	402[p]	52.2	43	-24.9	307	3.7	0	:

(p) Provisional Value

It can be seen that over the period 2001-6 there was a decrease in personnel by government of nearly 25 person equivalents. However, there has been a great increase in R & D personnel in business enterprises. The contribution of Higher Education has only increased slightly. Nonetheless, Higher Education in Malta provides a significant input in Research and Development in Malta.

6.4 Participation of Higher Education in the RTDI Programme

The National Research, Technological Development and Innovation (RTDI) Programme, as well as the National Research and Development funding programme for Malta are government's initiatives and investments in Research and Development. The RTDI programme was designed and formulated to achieve a number of core objectives:

- to promote a culture for continuous scientific research and innovation as well as provide the technical support for Malta to meet its requirements for the implementation of the Acquis Communitaire; and
- to encourage public-private sector partnerships and cross-sectoral synergies, involving all parties in the take-up of science and technological research and development.

The National RTDI Programme was designed to encourage an increasing investment in research and innovation activity to comply with the 3% Lisbon and Barcelona targets. The contribution for research and development under the programme has grown as is shown in the table below.

79 http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsc00025

80/81 Eurostat, Statistics in Focus, 91/2008, 91/2008, Science and Technology, Wilen Haken, R & D Expenditure and Personnel.

Table 6.8: Amount of funding and projects awarded under the RTDI programme

Year	Funding Available €'000	Proposals submitted	Funding requested €'000	Proposals Selected
2004	700	85	7,000	14
2006	930	58	6,800	7
2008	700	40	5,400	8
2009	300	17	1,500	3
2010	700	40	5,800	5

The University of Malta has been very active in securing many of the funds available for Research and Development. In fact, in the 2004 call, 12 out of the 14 projects were assigned to the University of Malta. Faculties involved in funding were: Engineering, Education, Medicine and Surgery, Science, ICT, and the Institutes of Agriculture; and Forensic Studies. In the 2006 call, the University of Malta was given 3 out of the 6 approved projects and is a partner in one other project. In the 2008 round, the University of Malta again managed to take up 6 out of the 8 projects awarded. The funds for research in 2009 were particularly low and in fact only 3 projects were funded. The funds allocated in 2010 were back to the same level as 2008. However, this year only 5 projects of a larger scale were funded.

6.5 The contribution of Research and Development by businesses

A Business Research and Innovation survey[82] carried out by the National Statistics Office revealed that, despite high innovation costs and limited funds for research, enterprises were able to offer an increased range of goods and services and an improvement in quality.

The survey carried out in 2006 requested information about Research and Development activities as well as Innovation initiatives split up between new and/or improved innovative products and innovative processes coupled with the investment to implement them. A total of 1,207 enterprises were surveyed, with a response rate of about 70 percent.

The research showed that in 2006, the Post and Telecommunications sector contributed the highest percentage share of total innovation expenditure, with approximately 21 percent, followed by the Food and Beverages sector at 20 percent. On the other hand the Chemicals and Chemical products sector, recorded the highest intramural Research and Development expenditure at approximately 29 percent. Enterprises which reported product and/or process innovations totalled 232, whilst another 5 enterprises reported ongoing or abandoned innovation activity. Tables from the press release issued by NSO are included in the Appendices at the end of this document.

Responding enterprises reported a total of 585 persons employed on full-time or part-time in Research and Development activities, where 468 were males and 117 females. Of these, 12 were Ph.D graduates, of which 11 on full-time basis and 409 read a university degree or a tertiary diploma. This shows that the number of researchers with a Ph.D working in R & D within the private sector is quite low.

82 National Statistics Office, Press Release 166/2008, September 2008, Business Research and Innovation 2004-2006.

Table 6.9: Distribution of Research and Development Personnel in Business 2004-6[83]

	Males				Females			
	Full-time		Part-time		Full-time		Part-time	
	2004	2006	2004	2006	2004	2006	2004	2006
Researches	142	177	36	48	34	48	9	14
Technicians and equivalents	96	139	25	44	11	14	1	10
Other supporting staff	38	33	17	27	17	19	2	12
Total	276	349	78	119	62	81	12	36
Ph.D graduates	5	9	4	2	0	0	0	1
Other University degrees and tertiary diplomas	172	261	34	69	35	62	5	17
Other qualification including experience	99	79	40	48	27	19	7	18
Total	276	349	78	119	62	81	12	36

From the 2006 Innovation Survey it emerged that the main obstructions to innovation activity for both innovative as well as non-innovative enterprises were high innovation costs followed by lack of funds both from within and outside sources. However, there is no lack of personnel for Research and Development. This is particularly the case with non-innovative enterprises. These enterprises also feel that they cannot compete against larger and more established enterprises. They are probably also not ready to invest in a market which they cannot predict due to the innovative aspect.

In the period 2006-8[84], the land and air transport sector contributed the largest percentage share of total innovation expenditure at 14.9%, followed by the telecommunications, programming and broadcasting sector (13.6%). The manufacture of basic pharmaceutical products and preparations sector registered the highest intramural Research and Development (R & D) expenditure, accounting for 24.9% of total outlay on R & D activities.

Table 6.10: Distribution of Research and Development Personnel in Business 2006-8[85]

	Males				Females			
	Full-time		Part-time*		Full-time		Part-time*	
	2006	2008	2006	2008	2006	2008	2006	2008
Researches	177	174	48	39	48	59	14	5
Technicians and equivalents	139	184	44	64	14	23	10	8
Other supporting staff	33	31	27	10	19	16	12	3
Total	**349**	**389**	**119**	**113**	**81**	**98**	**36**	**16**
Ph.D graduates	9	6	2	4	-	3	1	-
Masters and first degree graduates	198	240	48	45	53	67	11	11
Diplomas	63	55	21	24	9	8	6	2
Other qualifications including experience	79	88	48	40	19	20	18	3
Total	**349**	**389**	**119**	**113**	**81**	**98**	**36**	**16**

There has not been much improvement in the number of researchers in the period of 2006-2008. This reflects the slightly downward trend that was registered. The main improvement was registered in the higher number of female full-time researchers in 2008, most of whom could very possibly have been part-timers in 2006.

83 National Statistics Office, Press Release 166/2008, September 2008, Business Research and Innovation 2004-2006.

84 National Statistics Office, Press Release 173/2010, 14 September 2010, Business Research and Innovation: 2006-2008.

85 National Statistics Office, Press Release 173/2010, 14 September 2010, Business Research and Innovation: 2006-2008.

Table 6.11: Enterprises indicating high importance of selected factors hampering innovation activity[86]

	Total 2002-04	Total 2004-06		Total 2002-04	Total 2004-06
Lack of funds within your enterprise or enterprise group			**Lack of information on markets**		
Innovative enterprises	23	34	Innovative enterprises	12	12
Non-innovative enterprises	40	54	Non-innovative enterprises	24	12
Lack of finance from sources outside your enterprise			**Difficulty in finding cooperation partners for innovation**		
Innovative enterprises	16	24	Innovative enterprises	9	14
Non-innovative enterprises	33	41	Non-innovative enterprises	18	16
Innovation costs too high			**Markets dominated by established enterprises**		
Innovative enterprises	31	37	Innovative enterprises	25	24
Non-innovative enterprises	79	68	Non-innovative enterprises	47	52
Lack of qualified personnel			**Uncertain demand for innovative goods or services**		
Innovative enterprises	14	16	Innovative enterprises	27	25
Non-innovative enterprises	20	17	Non-innovative enterprises	71	42
Lack of information on technology					
Innovative enterprises	5	4			
Non-innovative enterprises	19	12			

6.6 Initiatives in Promoting Research and Development through investment in post-graduate studies

It is evident that if Malta is to increase its expenditure and investment in research and innovation, the first step is to increase the supply of human capital trained as researchers. This implies that the number of Master and Doctoral graduates in Malta needs to increase.

One recent major initiative aimed towards achieving this goal is the introduction of the Strategic Educational Pathways Scholarships (STEPS) scheme which aims to provide more opportunities to promote further specialisation at higher levels of education particularly at Masters' and Doctoral level. The National Commission for Higher Education (NCHE) believes that high quality postgraduate education is of central importance to a number of objectives, such as:

- to increase research and development activity in Malta;
- to enhance the development of academic staff in growing or new fields of study;
- to support the development of more research activity in growing or innovative fields of study;
- to build a more highly skilled workforce; as well as
- to provide impetus for precious impact and social benefit of groundbreaking discoveries[87].

86 Adapted from: National Statistics Office, Press Release 166/2008, September 2008, Business Research and Innovation 2004-2006.

87 Information extracted from: www.nche.gov.mt/mediacenter/PDFs/1_MGSS-PG_2011_Regulations.pdf

This opportunity comes in conjunction with other opportunities for study such as the Malta Government Scholarship Scheme for Post Graduate Studies, the Commonwealth Scholarships, Chevening Scholarships and fellowships as well as other opportunities for study abroad in areas which are not yet provided within the national education system.

6.7 Conclusion

This chapter was an attempt at obtaining a snapshot of the level of Research and Development in Malta and the contribution of Higher Education to research. It can be seen that Higher Education is contributing to R & D in terms both of having personnel dedicated to research as well as securing funding for Research and Development.

As the most recently approved projects under the RTDI project show, the University of Malta is starting to forge closer links in its research through the partnerships in these projects. On the other hand, Government has shown over the last few years a more determined and focused commitment through its institutions to promote research and development by providing adequate funding for scholarships (graduate studies at all levels) as well as specific budgetary allocations for research projects targeted towards development in key sectoral issues.

Chapter 7:
Industry's select opinion on HE qualifications

7.0 Introduction

This chapter will look at the quality of graduates from the University of Malta and obtain insight into how well they are prepared for the local labour market. In line with the government's vision to establish Malta as a Centre for Excellence in the areas of Tourism; Education; Health; High value-added manufacturing and financial services, special focus will be given to graduates in these areas.

Projections made by the National Commission for Higher Education[88] about the economy over the coming decade include the following:

- Over 37,000 jobs would be made vacant by retiring workers;
- Additionally, over 40,000 jobs need to be created to increase the activity rate of the labour force from 59% today to a target of 70%;
- In total, over 77,000 jobs will need to be created to achieve these activity rate targets;
- This implies that in the next decade:
  - for female activity rates to reach 41%, 16,600 women need to join the workforce;
  - for employment rates of 55-64 years olds to reach 35%, 3,400 older workers need to be retained within the workforce;
  - 34,200 people from the inactive or active population would need to upgrade their skills to higher qualification levels;
  - 63,500 of the same cohorts would have to update their skills from low to medium qualifications;
  - the proportion of low skilled workers needs to fall drastically.
- For education this implies that:
  - for target participation rates to be achieved, students aged 16-24 need to increase by 40%, from 31,000 students to 43,500 students in any year;
  - the funding allocation towards further and higher education would also need to increase by around 40% (not factoring for economies of scale and efficiencies), costing around €140 million more over the next few years.

The implications are that not only do more people need to be trained, but also that the provision of training should be better. The main aim of this small probing exercise is to obtain feedback from employers within the sectors identified as having potential to become centres of excellence with respect to how well prepared graduates are technically and professionally, socially as well as in terms of understanding the work environment of the local labour market. This exercise should in no case be generalised to reflect the state and quality of the current new graduates, but should be considered as just a few examples which serve to highlight the main issues that need to be taken into consideration with respect to the employability of graduates.

7.1 Methodology

This chapter describes a small scoping exercise which was carried out in order to obtain some feedback from employers within the local labour market about the quality of graduates from the University of Malta. The main aims of this exercise were to:

88 National Commission for Higher Education (NCHE), 2009, Report on Skills for the Future, Report by the National Commission for Higher Education on the outcomes of the conference held on the 19th September 2008, p. 13.

- obtain feedback on how well technically-prepared new graduates are;
- ask employers about the quality of graduates in terms of social and communication skills and how important these soft skills are for work;
- focus on the relevance of exposure to the labour market through work experience during training; and
- learn more about the graduates' expectations in terms of jobs and remuneration.

The probing exercise involved a short conversation with a number of employers (20). Basically the employers were asked the following questions:

- How well do you think that graduates in your sector are prepared during their undergraduate studies (a) technically, and (b) in terms of social and communication skills?
- Do you feel that new graduates have a good understanding of work within the local labour market?
- Is there any type of training which the University may provide in order to have better prepared graduates?
- What are your comments about the graduates' expectations in terms of type of job and salaries requested?

Overall a total of 20 employers were contacted. The table overleaf gives the total number of employers in each of the different sectors contacted. An effort was made to have as much as possible a good distribution across the different sectors: Financial, Education, ICT, Manufacturing, and Healthcare.

As much as possible large employers in the sector were contacted so that they could talk about experience of a number of graduates within their employment. Most of the employers were contacted by telephone and the questions were set in the form of an informal discussion. It is to be noted that employers were very cooperative and willing to express their opinion on the issue.

Table 7.1: Frequency of employers contacted across the sectors identified

Sector	No. of Employers	Graduates
Education	4	Teachers/TEFL teachers Graduates from Faculty of Education and Arts
Financial	3	Graduates from Faculty of Economics, Management and Accountancy
Manufacturing	4	Mechanical and Electrical Engineering
Healthcare	2	Faculty of Medicine and Institute of Healthcare
ICT	4	Institute of Computer Studies – B.Sc. ICT(Hons.), B.Sc. (IT& Business)
Tourism	3	Bachelor in Tourism Studies & ITS graduates

7.2 Main trends obtained

In order to obtain a clear view of the employers' views, each of the sectors will be each discussed in turn. This approach will make it possible to have some insights into the type of graduates prepared for the different sectors of the labour market.

Manufacturing

This section tackles the comments made by employers, more specifically, the Human Resource managers of large manufacturing companies. In most cases, employers talked about the quality of electrical and mechanical engineers. One employer from the Pharmaceutical sector employed mainly science graduates.

- **Technical preparation of graduates:** The employers interviewed overall agreed that more or less engineers graduating from the University of Malta had an overall good technical background. They felt that many of the graduates recruited directly from University tended to have the required technical background knowledge to perform the required job within their enterprise. Employers, however, also commented that mechanical and electrical engineers tended to lack practical skills and needed some time in order to adapt to the practical aspect of the job. A similar response was obtained by manufacturers in the Pharmaceutical sector employing science graduates. This was not considered as a particular deficiency but mainly the result of the limited work experience that many graduates tend to have during their undergraduate studies. This statement was said mainly in comparison to students from MCAST who tend to have more on-the-job training when compared to University graduates. On the other hand, while strong on exposure to the practical aspect of work, MCAST students were considered to be less academically prepared when compared to University of Malta students. Nonetheless, many of the companies stated that they provide their own in-house training courses, particularly for new recruits which make up for these weakness and prepare graduates for the job within their enterprise;

- **Soft skills and communication skills**: Employers from the manufacturing sector felt that graduating engineers' social and communication skills still had room for improvement. They commented that although one cannot generalise, as they did come across a number who did not have any problems, they still felt that there is a need for new graduates to have a better command of the English language, report writing as well as social skills with respect to relating to others at the work place. One employer stated that this is evident from students' lack of interest in participating in extra-curricular activities. Having said this, employers stated, particularly those from larger companies, that they provide new recruits with an induction course helping the newly recruited employee improve these competences. However, there could be more focus on helping graduates developing these skills as part of their tertiary training;

- **Experience of the labour market:** Employers stated that newly graduated engineers tend to lack work experience in the field and tend to be green with respect to understanding the world of work. This is often reflected in graduates applying for jobs, having high expectations in terms of salary requirements, and in return, they often do not possess that extra talent and capability that one would expect. One employer complained that there is a culture where new graduates believe that they should be given a job by right. This same employer went on to highlight how graduates' attitude towards work was "not the right one". Another employer stated that unfortunately there is a culture which focuses only on rights and there is little awareness of duties. All these comments reflect the newly graduates' lack of knowledge of the world of work and the importance of work experience as part of a professional's level of proficiency in his/her area of specialisation;

- **Suggestions for improvement in the training of graduates**: Employers put forward a number of suggestions that can be taken up as part of undergraduate studies. All employers stated that graduates would definitely benefit from work experience in the form of work

placements during their studies. Employers suggested that students could make better use of the summer months and use them for work placements within the sector. They recognised that there have been initiatives in this aspect but that students would probably benefit if work experience became an integral part of tertiary education;

- **Graduates' expectations from the labour market:** As already indicated, employers emphasised the need for undergraduates to have work experience. It could either be a work placement during summer or form part of the degree plus programme which is already run by the University of Malta. Another suggestion put forward was that training could be in the form of a project in order to build links with the local industry. The concept of internships was also put forward as a possibility. In addition, employers also mentioned that graduates would benefit from training to improve their social and writing skills. They also felt that some exposure to business concepts and marketing practices would help them understand better the labour market and the importance of competitiveness. Overall, there was a positive attitude from the industrial sectors involved in this study and many stated that they already had some form of such experiences and that they would be willing to participate and help in the implementation of work experience for tertiary students;

The gist obtained from these few interviews is that while overall the quality of graduates for the manufacturing sector is quite good, there is still room for improvement, particularly in the exposure to the world of work and in helping graduates develop their social skills as well understanding how business works. There also need to be initiatives to improve work ethic. Obviously, training can never fit employers' expectations fully as the labour market and labour demands change continuously

Education

Employers in this sector included both those involved in the provision of compulsory education as well as employers in the field of teaching English to foreigners. The graduates working in this sector are either graduates from the Faculty of Education or Graduates in English from the Faculty of Arts. It is to be noted that employers from English language schools stated that they do not tend to employ many graduates for full-time employment as the requirement is the TEFL – Teaching English as a Foreign Language training course which is not a degree at tertiary level. The comments made by these employers were mainly with respect to graduates working in this sector.

- **Technical preparation of graduates:** Graduates were more or less considered to have a good level of knowledge of the English language, maybe a little better for B.A. graduates but not always the case. However, there tends to be an overall weakness with fluency of the spoken language. Education students were inclined to have better teaching skills. In the EFL sector, however, graduates tend to have problems to target their teaching for adult learners. Employers usually have their own in-house training programmes to train graduates on how to tackle and teach adults. The main problem relates to the limited general knowledge that graduates tend to have due to their young age and inexperience of life compared to older workers. As one employer described, young graduates tend to not have good general knowledge or thorough insights on current affairs. With respect to graduates working within the compulsory education sector, the quality of graduates is more or less acceptable, even though employers do come across new graduates who are not up to standard.

- **Soft skills and communication skills:** Graduates in this sector do tend to have a good level of social skills, even though there is always room for improvement. This applies to graduates working in the compulsory sector as well in the English teaching area. They overall tend to lack the so called people skills. This is attributed mainly to the lack of hands on experience within the

world of work rather than a question of the person's personality. Employers agreed that with time and work experience, these young workers improve and become better;

- **Experience of the labour market:** In the case of compulsory education, more or less new graduates have a good experience of what to expect from the local labour market. However, there is still an overall feeling that graduates lack work place values and that these need to be instilled from a young age as early as the secondary level of education. Teaching is still considered as a vocational job and as such members of the profession should have particular attitudes and values;

- **Suggestions for improvement in the training of graduates:** One of the employers specified how it is important not only to provide students with work experience, but with experiences which are fruitful and provide opportunities for students to grow on a personal and professional level. This particular employer stated that unfortunately many students who take on part-time employment tend to develop a negative experience of employers who exploit them and do not respect them, and that this is instilling in young people a negative attitude towards employers which should not be the case. This mainly results in many students working within particular sectors which are demanding and often not within the area of study of the students. Thus the work experience has limited value in terms of professional development;

- **Graduates' expectations from the labour market:** There were not many relevant comments with respect to this aspect as salary scales tend to be more of less of the same level within the sector.

From the interviews conducted there seems to be potential for further development for graduates in the teaching of English as a Foreign Language sector – particularly with respect to the teaching skills needed for adult learners. Additional training should enhance the students' people skills as well as encourage interest in current affairs and cultural aspects in order to increase the graduates' general knowledge which they can tap on when teaching.

Financial services

Employers in this sector recruit graduates from the Faculty of Economics, Management and Accountancy. They can work in the various aspects of financial services which have also been identified by the Government of Malta as a sector where Malta can become a centre of excellence.

- **Technical preparation of graduates:** Many of the employers from the financial sector stated that more or less graduates had overall good academic knowledge. However, the main problem is that new graduates tend to have mainly academic knowledge and limited exposure to experiences within the financial sector. An example given by one employer was that students would have talked a lot about income tax returns but wonders how much they would have actually tackled a real situation as part of their training;

- **Soft skills and communication skills**: Employers noted that graduates tend to be ashamed to ask for help. They tend to lack those skills which are necessary for marketing and dealing with clients. One employer in the banking sector compared Maltese graduates to foreigner graduates and stated that the lack of social skills in some of the local graduates is notable and in many cases local graduates never manage to change and make up, even with experience and training;

- **Experience of the labour market**: Graduates in this sector tend to be unfamiliar with the sector due to their limited experience of the labour market. One employer stated that they tend to behave like sixth form students rather than graduates. This same employer stated that it usually takes some time to train such workers to achieve the desired quality, particularly in his sector;

- **Suggestions for improvement in the training of graduates:** Employers suggested two different opinions. One included a more practical and hands on approach in the training provided at University. They suggested that students need to experience real practical examples and tutors need to move from theory to practice. Employers also suggested that University students should use the summer months to obtain work experience in the sector. One employer stated that this trend has started as some students work with auditors and accountants during the summer months, and that this experience does show when new graduates start their first real full-time job. The employers interviewed encouraged the inclusion of further work experience in this sector;

- **Graduates' expectations from the labour market**: One employer stated that young graduates tend to prefer more secure jobs, even if remuneration is less. His experience was that after having trained new graduates, in less than two years they move on to join the civil service, or banks. Experience has shown, an employer added, that it is not worth training new graduates but it is better to attract workers with a certain amount of experience from other employment.

These interviews, although few, and thus cannot fully reflect the situation in the sector, highlight the importance of work experience in helping graduates understand the sector as well as to develop those social skills that are necessary when working with other people.

Tourism

Training for the Tourism sector takes place at Graduate level at the University of Malta, as well as at the Institute of Tourism Studies which is a vocational and Higher Education College. Employers interviewed were asked to provide feedback on both University and ITS trained students.

- **Technical preparation of graduates:** Employers from the Tourism sector stated that there was a difference between graduates coming from the University of Malta and those coming from ITS. The difference related mainly to more academic orientation in the case of graduates from the University, and more work oriented training in the case of ITS. Those coming from ITS were considered to be better prepared to work in the sector.

- **Soft skills and communication skills**: Those coming from ITS were thought to have good social and work skills for the sector. Employers considered that the time spent working abroad was very beneficial as this instilled in many of them a positive work ethic and approach which is very important in the tourism sector.

- **Experience of the labour market:** As has already been indicated, employers noted how those coming from ITS are well prepared to the realities of work and have acquired work-related skills. This is considered to be the result of the greater exposure to the world of work which ITS and the apprenticeship scheme provides.

Suggestions for improvement in the training of graduates: The only recommendation put forward was that of increasing work experience in the institutions providing education and training in this sector.

ICT

Employers within this sector commented on graduates who focus only on ICT or else those graduating with ICT and business studies.

- **Technical preparation of graduates:** Many of the employers stated that ICT graduates, particularly those with a specialisation only in ICT are of a very high quality. Employers stated that when recruiting they will surely find good quality people and were very pleased with the technical preparation that the University was providing. Graduates in ICT and business tend to be less technical and would prefer more business oriented work. Employers also talked about ICT students from MCAST. There was also a comment by one employer about graduates from the local private university in ICT where graduates in this case had the advantage of receiving tuition from tutors from within the industry and are thus given a more practical and realistic view of the labour market over the academic training. The comment was that they do not tend to be of the same technical and academic level as University graduates although this is not across board as one can also come across well prepared MCAST.

- **Soft skills and communication skills:** Employers were overall happy with the level of social skills and communication of ICT level. The general feedback was that the product was of excellent quality and this enabled new graduates to integrate and become part of the workforce very quickly within the company. Some of their graduates also quickly developed those skills necessary to also deal with customers themselves on behalf of the company.

- **Experience of the labour market**: The only comment that employers made about preparation for the labour market was that the training provided at University was too much Microsoft oriented and that less attention was being given to other software such as ORACLE. They pointed out that University must keep an open mind and remember that their graduates may work in different areas and using different programming and to cater for the whole range of the IT industry. Apart from this they were very happy with the current product of ICT graduates.

- **Suggestions for improvement in the training of graduates:** Due to the good opinion of ICT graduates very few recommendations and suggestions were put forward. However, employers were in favour of experiences of working in ICT companies during training as well as having projects which are directly linked with the labour market as two desirable suggestions.

- **Graduates' expectations from the labour market:** There were no particular comments from employers about this aspect.

Healthcare

Employers within this sector are few as they include either the government within the National Health Service or else the private sector which is characterised by few main employers. This is the reason for which only two employers were contacted and the graduates discussed were those graduating with a Bachelor of Science (Nursing) and those graduating in Medicine and Surgery.

- **Technical preparation of graduates:** Employers are overall happy with the academic level of graduates in that they are quite knowledgeable. The main comment was with respect to nursing where there was a need for more practical hands-on experience. As one employer put it, it is not enough to place a nurse in a ward, but s/he needs to work more in a teamwork environment in which staff members can show and teach the trainee at the workplace.

- **Soft skills and communication skills:** The particular comment put forward was mainly from the private sector. The employer stated that in the private sector, customer and patient care is paramount and he felt that initial training does not take into consideration the fact that some of the trained graduates may end up within the private sector. In fact, graduates tend to lack some of the customer - patient relationship skills.

- **Experience of the labour market**: There was overall agreement that training did provide a degree of experience of the sector, although this tends to be more within the government provision. However, there was a comment that work experience should be more learner- focused and may also include a learning programme for the trainees.

- **Suggestions for improvement in the training of graduates**: The suggestions put forward build on the previous comments refer to the awareness of training institutions of the private sector and thus to include more customer care skills within the training courses. It was also suggested to have trainees, particularly nurses, working closely with professional staff during training so that they can have richer learning experiences.

7.3 Discussion

Although this was just a small exercise, it does provide insight into the main issues worth highlighting and considering with respect to the preparation of graduates for the world of work. The range of sectors included show certain common trends which reflect that the whole education system in Malta is having a particular impact on the way that young people are prepared for the world of work.

The first thing to highlight is that the trends obtained for graduates are not much different from those of other youths entering the labour market without tertiary qualifications. In a study on the school to work transition[89], employers talking about youths made similar comments on how Maltese youths tend to have a good academic preparation but the education system can do more to help them develop better communication and social skills. This same study highlighted the importance for work experience in helping youths be more employable, thus giving value to the exposure to the world of work during the training period. In addition, if one looks at the outcomes of the conference held on the skills required for the future organised by the National Commission for Higher Education[90], one finds that in the tourism sector there is need for service oriented skills; teamwork, and language skills; communication, management, problem solving and sales skills for the financial sector; while in the health, education, and manufacturing sectors again there is need for service oriented, marketing, communication as well as non-routine skills. This analysis shows that investing to help graduates develop these soft skills will not only prepare them better for the world of work, but will also help provide an adequate supply of graduates to the labour market to fulfil future job requirements.

Another aspect which emerges is that there is a difficulty for employers, and sometimes from the graduates themselves to understand that obtaining a tertiary degree is just the first step in a profession and in one's working life. Thus, as a first step, it is important to understand that one should not expect new graduates to be fully fledged professionals and that they have already gained all the required skills, and experience to be able to fulfil job requirements in the labour market immediately. Employers need to understand that they have a person with potential, but that it is also important to invest in nurturing that potential to the benefit of their business. New graduates, on the other hand, need to realise that their degree is just the first step in their working life, that they will grow and learn with experience and that

89 Gatt S. & Gatt K., 2006, *The School to Work Transition of Young People in Malta*, Monitoring and Evaluation Unit Business Development Division Employment and Training Corporation (Malta)

90 National Commission for Higher Education (NCHE), 2009, Report on Skills for the Future, Report by the National Commission for Higher Education on the outcomes of the conference held on the 19th September 2008

they still need to invest in further training if they want to be able to move forward in their careers. This is being pointed out so that the benchmark for evaluating new graduates should not be the same as that for evaluating professionals with a number of years of experience, and that this is not to be considered a disadvantage, but a good investment for the future.

This aspect leads to two other issues: the school to work transition and induction into the profession or line of work. Malta's traditional approach for the preparation of youths from general education to the world of work has been more or less, with some exceptions and unlike the vocational track, from school straight to work. This tradition can still be observed in the way that tertiary education courses have been designed

these past years where new graduates emerge with little work experience. It is only recently that the University of Malta has focused on the need for a more smooth transition. This has been reflected in the inclusion of elements of work in some courses. For example, in education, student teachers have periods of teaching practice in schools as part of their training. A similar trend is also present in the faculty of Pharmacy where students spend a semester as trainees in pharmacies. Other areas of study such as engineering, financial sector, Tourism etc, encourage students to use their summer months to obtain work experience in their area of study. All these initiatives show how the University of Malta is responding to help graduates be better prepared to enter the labour market and to make the school to work transition a smoother one. There will need to be a time when work experience and education will be intertwined in tertiary courses in order to have the best initial training possible.

This need for greater exposure to the world of work is recognised by both employers as well as those providing training. Besides initiatives to incorporate more work experience as part of tertiary studies, the University of Malta has developed what it calls the Degree Plus programme[91] which aims to provide participants with additional practical skills and formative experiences that can enhance their character and employability. So far, initiatives have been mainly in the areas of culture; entrepreneurship and careers; ICT; voluntary work; languages; music; wellness and sport; and work with student organisations.

The school to work transition is, however, not only the responsibility of the training institutions; in this case the University of Malta. Employers also need to recognise that new entrants to the labour market need help and support to adapt to new realities. Such help is usually incorporated within induction courses or periods. A number of large companies, particularly in the manufacturing industry tend to have a long period of initial training when they start work. Good effective induction programmes would help graduates to cope with the initial pressures of the world of work as well as be integrated in the best possible way for the benefit of both the worker and his/her employer. It is then that within an era of lifelong learning, workers engage in continuous professional development which enables them to grow and stay employable during their work life.

7.4 Conclusion

In putting together the comments made by employers about University graduates, it appears that the technical and academic preparation is of a high standard. However, new graduates tend to lack communication and social skills which are often linked with their lack of exposure to the labour market. Employers overall also commented on the often too high expectations in terms of job roles and salaries that newly graduates have. These findings are in line with comments made at the 'Skills for the Future' conference organised by the National Commission for Higher Education (NCHE) where employers advocated a need in the future for soft skills and language proficiency in many of the sectors of Malta's local labour market[92].

91 Information extracted from http://www.um.edu.mt/degreeplus/home.html

92 National Commission for Higher Education (NCHE), 2009, Report on Skills for the Future, Report by the National Commission for Higher Education on the outcomes of the conference held on the 19th September 2008.

The overall recommendations put forward were that Higher Education Institutions (especially University) need to work closer to the labour market and industry. Links can be in different forms, through attachments, work placements as well as joint projects which students do for the benefit of the local industry.

It can therefore be concluded that tertiary education in Malta, similar to other areas across Europe, needs to face the challenge of training new graduates to work within the local labour market which is becoming more complex, more challenging and fast changing and growing within a global economy. Higher Education Institutions cannot but take note of such need and act upon it.

List of *Bologna* Seminars Malta

2008 - 2009 cycle:

- ECTS/DS Training Seminar 2008-2009, 30-31 October 2008.
- The Three Cycle System – Learning Outcomes, 6 February 2009.
- Quality Assurance, 25 February 2009.
- National Training Seminar for *Bologna* Experts 2008-2009, 17-18 March 2009.
- Recognition, 6 May 2009.
- Euro-Med Seminar for *Bologna* Experts 2008-2009, 22-23 June 2009.

2009 - 2011 cycle:

- Quality Assurance: A National *Bologna* Process Seminar, 19 November 2010.
- The *Bologna* Process: A National *Bologna* Expert Training Session, 14 December 2010.
- Employability: A National *Bologna* Process Seminar, 20 January 2011.
- Student-Centred Learning: A Bologna Process International Conference, 16-17 February 2011.
- Education, Research and Innovation: A National *Bologna* Process Seminar, 10 March 2011.
- International Openness and the External Dimension: A *Bologna* Process International Seminar, 18-19 April 2011.
- Learning Outcomes: A *Bologna* Process Training Conference, 20 May 2011.

The three main Higher Education Institutions in Malta

University of Malta (UoM)

The University of Malta is the main provider of Higher Education in Malta. It is publicly funded and is open to all those who have the required qualifications. Over the past few years, the University has reviewed its structures in order to be in line with the Bologna Process and the European Higher Education Area. There are approximately 10,000 students at the University including over 600 foreign/exchange students from nearly 60 different countries, following full-time or part-time courses.

The University is geared towards the infrastructural and industrial needs of the country to provide expertise in fields mostly relevant to Malta's socio-economic development. Almost 3,000 students graduate in various disciplines annually. The degree courses offered by the University are designed to produce highly qualified professionals, with research experience that enables students to enter and move within the labour market.

Malta College of Arts, Science and Technology (MCAST)

MCAST is the main institution offering vocational education in Malta. The college also gives students the opportunity to pursue their studies up to Higher Education. MCAST offers a variety of vocational programmes from entry level to Diploma, Higher National Diploma and in certain cases vocational Degree levels.

MCAST works hand in hand with the industry to design qualifications which equip the students with the necessary skills and competences to qualify for employment. The College is also working towards becoming a Community College that is flexible to meet the lifelong learning needs of adult learners.

Institute of Tourism Studies (ITS)

The Institute of Tourism Studies is a vocational education institution in Malta. It offers education and training to students enabling them to embark on professional careers within the Hospitality and Tourism Sectors. The institute aims to develop and enhance the students' intellectual abilities by offering a wide range of academic subjects which are complemented by the recreation of actual working environments.

ITS also provides work experience opportunities in the industry so that the transition into the world of work occurs smoothly. The Institute of Tourism Studies is firmly committed to provide an educational structure aimed at guaranteeing excellent standards of service within the Hospitality Industry.

University Graduates

Table: Distribution of Graduates per field of study[93]

	2002-3			2003-4			2004-5			2005-6		
	M	F	TOT	M	F	TOT	M	F	TOT	M	F	TOT
Teacher training and educational science	128	273	401	108	304	412	85	534	619	99	226	325
Humanities and the Arts	117	165	282	100	161	261	102	147	249	152	263	415
Social and behavioural science	8	8	16	6	5	11	18	8	26	64	83	147
Journalism and information	21	40	61	36	74	110	52	69	121	7	14	21
Business and administration	247	199	446	195	207	402	275	287	562	265	269	534
Law	175	218	393	190	225	415	191	244	435	163	317	480
Science, Mathematics and Statistics	30	19	49	45	37	82	33	22	55	28	20	48
Computing	47	13	60	55	16	71	64	25	89	88	32	120
Engineering and engineering trades	60	12	72	43	9	52	48	12	60	50	12	62
Architecture and building	20	6	26	24	17	41	23	14	37	54	13	67
Agriculture, forestry and fishery	1	1	2	20	7	27	0	0	0	15	11	26
Veterinary	0	1	1	1	0	1	0	2	2	0	0	0
Health	95	132	227	86	141	227	135	216	351	118	212	330
Social services	1	17	18	7	22	29	45	68	113	4	14	18
Personal services	0	0	0	4	6	10	7	8	15	18	66	84
Security services	4	2	6	0	0	0	1	6	7	0	0	0
Total	**954**	**1106**	**2060**	**920**	**1231**	**2151**	**1079**	**1662**	**2741**	**1125**	**1552**	**2677**

Table: Graduates (Levels 5 & 6) per Faculty and Course 1999-2003

93 National Statistics Office, 2008, Malta in Figures 2008 & National Statistics Office, 2008, Malta in Figures 2007.

	1999-2000			2000-1			2001-2			2002-3		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology												
Bachelors of Communications	5	3	8	28	14	42	21	12	33	17	13	30
Bachelors of Communications (Hons.)	10	14	24	11	9	19	10	8	18	23	8	31
Total	**15**	**17**	**32**	**39**	**23**	**61**	**31**	**20**	**51**	**40**	**21**	**61**
European Documentation and Research Centre												
Bachelor of European Studies	0	0	0	3	0	3	0	0	0	2	0	2
Bachelor of European Studies (Hons.)	1	0	1	1	2	3	1	1	2	11	8	19
Total	**1**	**0**	**1**	**4**	**2**	**6**	**1**	**1**	**2**	**13**	**8**	**21**
Faculty of Architecture and Civil Engineering												
Bachelor of Engineering and Architecture (Hons.)	8	31	39	11	18	29	10	17	27	6	20	20
Total	**8**	**31**	**39**	**11**	**18**	**29**	**10**	**17**	**27**	**6**	**20**	**20**
Faculty of Arts												
Bachelor of Arts	34	10	44	20	12	32	13	11	24	13	9	22
Bachelor of Arts (Hons.)	40	23	63	41	20	61	40	16	56	101	46	147
Total	**74**	**33**	**107**	**61**	**32**	**93**	**53**	**27**	**80**	**114**	**55**	**169**
Faculty of Dental Surgery												
Bachelor of Dental Surgery	6	4	10	4	11	15	4	11	15	0	0	0
Total	**6**	**4**	**10**	**4**	**11**	**15**	**4**	**11**	**15**	**0**	**0**	**0**
Faculty of Economics, Management and Accountancy												
Bachelor of Accountancy (Hons.)	30	24	54	24	29	53	23	30	53	25	40	65
Bachelor of Arts (Hons.) in Social Policy/Social Work	12	3	15	12	2	14	13	2	15	13	1	14
Diploma in Social Administration	15	5	20	9	0	9	8	0	8	4	0	4

	1999-2000			2000-1			2001-2			2002-3		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Bachelor in Social Administration	2	2	4	0	0	0	0	0	0	0	0	0
Bachelor of Commerce	47	48	95	0	0	0	50	56	106	73	68	141
Bachelor of Commerce (Hons.)	49	43	92	44	43	87	42	41	83	49	50	99
Bachelor of Science in Business and Computing	2	17	19	3	16	19	3	14	17	8	13	21
Diploma in Commerce	0	0	0	0	0	0	0	0	0	4	2	6
Diploma in Management Studies	0	1	1	26	57	83	0	0	0	0	0	0
Diploma in Management (Occ. Health)	1	18	19	2	9	11	22	48	70	30	46	76
Diploma Social Studies	0	0	0	0	0	0	2	7	9	0	1	1
Diploma in Public Administration	0	0	0	0	0	0	0	0	0	11	12	23
Diploma in Diplomatic Studies	0	0	0	3	3	6	0	0	0	6	2	8
Diploma in Social Studies (Gender & Development)	14	0	14	23	6	29	20	6	26	2	0	2
Diploma in Social Studies (Industrial Relations)	2	20	22	8	13	21	8	13	21	0	0	0
Total	**174**	**181**	**355**	**154**	**178**	**332**	**191**	**217**	**408**	**175**	**215**	**460**
Faculty of Education												
Bachelor of Arts (Hons.) in Youth and Community Studies	0	0	0	0	0	0	10	3	13	11	9	20
Bachelor of Education	0	0	0	0	0	0	3	6	9	3	6	9
Bachelor of Education (Hons.)	151	75	226	171	77	24	165	68	233	132	73	205
Bachelor of Psychology	18	5	23	19	9	28	17	6	23	9	8	17
Bachelor of Psychology (Hons.)	28	8	36	21	9	30	21	6	27	37	8	45

	1999-2000			2000-1			2001-2			2002-3		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Diploma in Facilitating Inclusive Education	0	0	0	5	1	6	0	0	0	0	0	0
Diploma in Youth Studies	6	0	6	13	6	19	2	2	4	4	2	6
Diploma in Computer Studies Education	0	0	0	0	0	0	0	0	0	7	5	12
Diploma in Adult Education	4	12	16	0	0	0	0	0	0	0	0	0
Diploma in Physical Education	16	9	25	9	19	28	0	0	0	0	0	0
Diploma in I.T. in Education	10	6	16	10	4	14	9	1	10	8	2	10
Total	**233**	**115**	**348**	**248**	**215**	**149**	**227**	**92**	**319**	**211**	**113**	**324**
Faculty of Engineering												
Bachelor of Engineering (Hons.)	8	46	54	0	13	13	7	41	48	12	53	64
Total	**8**	**46**	**54**	**0**	**13**	**13**	**7**	**41**	**48**	**12**	**53**	**64**
Faculty of Information and Communication Technology												
Bachelor of Science (Hons.) in Information Technology	4	23	27	0	26	26	0	26	26	4	24	28
Bachelor of Science in Information Technology	1	2	3	0	0	0	3	1	4	1	2	3
Diploma in Information Technology	2	10	12	0	0	0	0	0	0	8	0	8
Total	**7**	**35**	**42**	**0**	**26**	**26**	**3**	**27**	**30**	**13**	**26**	**39**
Faculty of Law												
Bachelor of Laws	52	28	80	52	50	102	44	40	84	65	44	109
Diploma of Notary Public	61	53	114	54	46	100	54	46	100	40	39	79
Diploma Legal Procurator	0	0	0	1	0	1	1	0	1	0	1	1
Total	**113**	**81**	**194**	**107**	**96**	**103**	**99**	**86**	**185**	**105**	**84**	**189**
Faculty of Education and Medicine												

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Bachelor of Pharmacy	0	0	0	0	0	0	0	0	0	0	1	1
Bachelor of Pharmacy (Hons.)	16	14	30	13	18	31	9	10	19	7	5	12
Total	**16**	**14**	**30**	**13**	**18**	**31**	**9**	**10**	**19**	**7**	**6**	**13**
Faculty of Science												
Bachelor of Science	0	0	0	0	0	0	0	0	0	0	1	1
Bachelor of Science (Hons.)	16	14	30	13	18	31	9	10	19	7	5	12
Total	**16**	**14**	**30**	**13**	**18**	**31**	**9**	**10**	**19**	**7**	**6**	**13**
Faculty of Theology												
Bachelor of Arts (Hons.) in Theology	0	5	5	2	1	3	1	6	7	0	1	1
Bachelor of Arts in Religious Studies	7	6	13	8	8	16	8	5	13	4	4	8
Bachelor of Arts in Theology and Human Studies	2	3	5	1	6	7	2	1	3	2	3	5
Diploma in Religious Studies	3	1	4	3	1	4	2	1	3	4	2	6
Licentiate in Sacred Theology	0	4	4	0	3	3	0	0	0	0	0	0
Total	**12**	**19**	**31**	**14**	**19**	**33**	**13**	**13**	**26**	**10**	**12**	**20**
Institute for Islands and Small States												
Diploma in Environmental Science	0	0	0	2	3	5	0	0	0	0	0	0
Diploma in Environmental Planning	7	12	19	0	0	0	0	0	0	0	0	0
Total	**7**	**12**	**19**	**2**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Institute of Healthcare												
Diploma in Health Science	8	13	21	1	1	2	1	1	2	1	1	2
Diploma in Nursing Studies	24	9	33	12	7	19	22	6	28	19	5	24
B.Sc. (Nursing)	14	2	16	6	4	10	5	5	10	10	3	13
Diploma in Med. Lab. Tech.	0	0	0	4	3	7	4	3	7	0	3	3

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Diploma in Radiography	0	0	0	1	3	4	0	0	0	7	1	8
Diploma in Psych. Nursing	5	0	5	0	0	0	0	0	0	3	2	5
B.Sc. (Hons.) Physiotherapy	0	0	0	9	10	19	7	6	13	18	7	25
B.Sc. (Hons.) Midwifery	1	0	1	0	0	0	0	0	0	13	4	17
B.Sc. (Hons.) Communication Therapy	0	1	1	1	0	1	0	0	0	3	0	3
B.Sc. (Hons.) Env. Health	0	0	0	0	0	0	0	0	0	0	9	9
B.Sc. (Hons.) Radiography	2	2	4	0	0	0	0	0	0	1	3	4
Total	**54**	**27**	**81**	**34**	**28**	**62**	**39**	**21**	**60**	**75**	**38**	**113**
Institute of Agriculture												
Diploma in Agriculture	1	10	11	5	12	17	5	10	15	0	0	0
	1	**10**	**11**	**5**	**12**	**17**	**5**	**10**	**15**	**0**	**0**	**0**
Institute of Forensic Studies												
Bachelor of Arts (Hons.) in Criminology	2	15	17	0	0	0	0	0	0	0	0	0
Diploma in Probation	4	0	4	0	0	0	0	0	0	0	0	0
	6	**15**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table: Graduates (Levels 5 & 6) per Faculty and Course 2004-2007

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology												
Bachelors of Communications	41	15	56	39	24	63	27	13	40	40	23	63
Bachelors of Communications (Hons.)	16	7	23	18	17	35	22	9	31	9	7	16
Diploma in Archives and Records Management	0	0	0	0	0	0	0	0	0	1	3	4
Diploma in Library and Information Studies	17	14	31	0	0	0	0	0	0	8	7	15
Diploma in Journalism	0	0	0	3	1	4	0	0	0	0	0	0
Total	**74**	**36**	**110**	**60**	**42**	**102**	**49**	**22**	**71**	**58**	**40**	**98**
Centre of Labour Studies												
Diploma in Social Studies	0	0	0	0	0	0	26	29	55	11	8	19
Total	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**40**	**55**	**11**	**8**	**19**
European Documentation and Research Centre												
Bachelor of European Studies	0	0	0	0	0	0	2	0	2	1	0	1
Bachelor of European Studies (Hons.)	7	8	15	10	11	21	16	7	23	23	13	36
Total	**7**	**8**	**15**	**10**	**11**	**21**	**18**	**7**	**25**	**24**	**13**	**37**
Faculty of Architecture and Civil Engineering												
Bachelor of Engineering and Architecture (Hons.)	13	23	36	9	9	18	26	29	55	12	24	36
Total	**13**	**23**	**36**	**9**	**9**	**18**	**26**	**29**	**55**	**12**	**24**	**36**
Faculty of Arts												

	2003-4			2004-5			2005-6			2006-7		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Bachelor of Arts	42	11	53	9	3	12	23	17	40	29	9	38
Bachelor of Arts (Hons.)	70	39	109	90	43	133	84	36	120	85	58	143
Certificate in Proof-Reading	0	0	0	0	0	0	14	30	44	0	0	0
Diploma in Arabic	0	0	0	0	0	0	14	16	30	0	0	0
Total	**112**	**50**	**162**	**99**	**46**	**145**	**135**	**99**	**234**	**114**	**67**	**181**
Faculty of Dental Surgery												
Bachelor of Dental Surgery	6	7	13	2	2	4	1	6	7	4	4	8
Total	**6**	**7**	**13**	**2**	**2**	**4**	**1**	**6**	**7**	**4**	**4**	**8**
Faculty of Economics, Management and Accountancy												
Bachelor of Accountancy (Hons.)	34	35	69	49	43	92	43	25	68	43	36	79
Bachelor of Arts (Hons.) in Social Policy/Social Work	0	0	0	0	0	0	0	0	0	31	4	35
Bachelor of Arts (Hons.) in Social Work/Social Administration	22	7	29	30	4	34	34	8	42	1	2	3
Bachelor of Arts (Hons.) Tourism Studies	6	4	10	8	5	13	12	8	20	17	5	22
Bachelor of Arts in Tourism Studies	0	0	0	0	2	2	3	2	5	5	5	10
Bachelor of Commerce	71	50	121	49	43	92	95	63	158	97	74	171
Bachelor of Commerce (Hons.)	55	57	112	70	61	131	74	60	134	68	71	139
Bachelor of Science in Business and Computing	10	19	29	11	25	36	11	26	37	14	32	46
Diploma in Commerce	0	0	0	11	25	36	0	0	0	7	6	13
Diploma in Management Studies	39	35	74	32	45	77	42	43	85	30	33	63
Diploma Social Studies	1	0	1	30	4	34	0	0	0	0	0	0

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Diploma in Public Administration	0	0	0	9	17	26	0	0	0	0	0	0
Diploma in Political Studies	0	0	0	2	8	10	0	0	0	0	0	0
Total	**238**	**207**	**445**	**301**	**282**	**583**	**314**	**235**	**549**	**363**	**268**	**581**
Faculty of Education												
Bachelor of Arts (Hons.) in Youth and Community Studies	0	0	0	0	0	0	2	3	5	5	4	9
Bachelor of Arts in Youth and Community Studies	7	4	11	0	0	0	0	0	0	1	1	2
Bachelor of Education (Hons.)	143	44	187	101	26	127	136	39	175	106	26	132
Bachelor of Psychology	23	7	30	4	2	6	2	1	3	1	1	2
Bachelor of Psychology (Hons.)	34	9	43	27	5	32	86	28	114	40	9	49
Diploma in Facilitating Inclusive Education	0	0	0	0	0	0	0	0	0	83	9	92
Diploma in Youth Studies	2	1	3	6	2	8	0	0	0	3	0	3
Diploma in Computer Studies Education	0	0	0	5	10	15	0	0	0	0	0	0
Dip. In Educ. (Individual needs)	0	0	0	309	8	317	0	0	0	0	0	0
Diploma in Adult Education	5	3	8	4	1	5	0	0	0	0	0	0
Diploma in Adult Training and Development	0	0	0	3	9	12	0	0	0	0	0	0
Diploma in I.T. in Education	0	0	0	9	3	12	0	0	0	0	0	0
Total	**214**	**158**	**282**	**468**	**66**	**534**	**226**	**71**	**297**	**239**	**50**	**289**
Faculty of Engineering												
Bachelor of Engineering (Hons.)	9	39	48	11	43	54	19	71	90	15	61	76

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Total	**9**	**39**	**48**	**11**	**43**	**54**	**19**	**71**	**90**	**15**	**61**	**76**
Faculty of Information and Communication Technology												
Bachelor of Science (Hons.) in Information Technology	0	0	0	14	32	46	4	29	33	10	36	46
Bachelor of Science in Information Technology	2	28	30	0	0	0	0	0	0	0	2	2
Diploma in Information Technology	4	8	12	0	7	7	3	14	17	3	10	13
Total	**6**	**36**	**42**	**14**	**39**	**53**	**7**	**43**	**50**	**13**	**48**	**61**
Faculty of Law												
Bachelor of Arts in Legal and Humanistic Studies	0	0	0	0	0	0	5	5	10	0	0	0
Bachelor of Laws	48	45	93	61	24	85	3	0	3	85	33	118
Diploma of Notary Public	65	41	106	47	43	90	62	33	95	56	48	104
Diploma Legal Procurator	0	0	0	4	1	5	4	0	4	0	0	0
Total	**113**	**86**	**199**	**112**	**68**	**180**	**74**	**38**	**112**	**141**	**81**	**222**
Faculty of Education and Medicine												
Bachelor of Pharmacy	0	0	0	0	0	0	0	1	1	0	1	1
Bachelor of Pharmacy (Hons.)	17	7	24	30	14	44	17	5	22	24	9	33
Total	**17**	**7**	**24**	**30**	**14**	**44**	**17**	**6**	**23**	**24**	**9**	**33**
Faculty of Science												
Bachelor of Science	0	0	0	0	0	0	1	0	1	3	1	4
Bachelor of Science (Hons.)	20	24	44	14	17	31	28	20	48	23	20	43
Total	**20**	**24**	**44**	**14**	**17**	**31**	**29**	**20**	**49**	**26**	**21**	**47**
Faculty of Theology												

	2003-4			2004-5			2005-6			2006-7		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Bachelor of Arts (Hons.) in Theology	1	3	4	1	1	2	3	0	3	2	3	5
Bachelor of Arts in Religious Studies	7	9	16	1	3	4	13	6	19	9	6	15
Bachelor of Arts in Theology and Human Studies	0	5	5	7	2	9	1	11	12	2	13	15
Bachelor of Sacred Theology	0	2	2	0	5	5	0	6	6	0	5	5
Diploma in Religious Studies	9	4	13	5	3	8	0	6	6	1	0	1
Licentiate in Sacred Theology	0	9	9	0	5	5	0	3	3	1	2	3
Total	**17**	**32**	**49**	**14**	**19**	**33**	**17**	**32**	**49**	**15**	**29**	**44**
Institute for Islands and Small States												
Diploma in Lace Studies	0	0	0	0	0	0	0	0	0	12	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**
Institute for Physical Education and Sport												
Diploma in Sport and Leisure	0	0	0	0	0	0	0	0	0	7	7	14
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**14**
Institute of Conservation and Management of Cultural Heritage (Heritage Malta)												
Bachelor in Conservation and Restoration Studies (Hons.)	5	8	13	2	2	4	9	2	11	1	0	1
	5	8	**13**	**2**	**2**	**4**	**9**	**2**	**11**	**1**	**0**	**1**
Institute of Healthcare												
Bachelor of Science	0	0	0	0	0	0	0	2	2	0	0	0
Bachelor of Health Science (Hons.)	20	10	30	43	25	68	33	12	45	85	22	107
Diploma in Health Science	9	13	22	4	2	6	63	23	86	62	15	77
Diploma in Nursing Studies	40	5	45	48	24	72	0	0	0	0	0	0
B.Sc. (Nursing)	16	6	22	26	9	35	53	14	67	0	0	0

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Total	**85**	**34**	**119**	**121**	**60**	**181**	**163**	**51**	**214**	**147**	**37**	**184**
Institute of Agriculture												
Diploma in Agriculture	5	16	21	0	0	0	0	0	0	0	0	0
Diploma in Water Operations Management	0	0	0	0	0	0	11	30	41	0	0	0
Total	**5**	**16**	**21**	**0**	**0**	**0**	**11**	**30**	**41**	**0**	**0**	**0**
Institute of Forensic Studies												
Diploma in Criminology	0	0	0	2	0	2	0	0	0	0	0	0
Diploma in Probation Services	0	0	0	6	1	7	0	0	0	0	0	0
Bachelor of Arts in Criminology	0	0	0	0	0	0	3	11	14	0	0	0
Total	**0**	**0**	**0**	**8**	**1**	**9**	**3**	**11**	**14**	**0**	**0**	**0**

Table: Graduates (Levels 5 & 6) per Faculty and Course 2008-2010

	2007-8			2008-9			2009-10		
	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology									
Bachelors of Communications	29	21	50	31	8	39	26	13	39
Bachelors of Communications (Hons.)	7	11	18	6	3	9	10	7	17
Diploma in Archives and Records Management	0	0	0	0	1	1	0	0	0
Diploma in Library and Information Studies	0	0	0	8	7	15	1	3	4
Total	**36**	**32**	**68**	**45**	**19**	**64**	**37**	**23**	**50**
Centre for Labour Studies									
Diploma in Social Studies	3	22	25	0	0	0	13	21	34
Total	**3**	**22**	**25**	**0**	**0**	**0**	**13**	**21**	**34**
European Documentation and Research Centre									
Bachelor of European Studies	17	7	24	0	0	0	0	0	0
Bachelor of European Studies (Hons.)	4	6	10	23	8	31	14	6	20
Total	**21**	**13**	**34**	**23**	**8**	**31**	**14**	**6**	**20**
Faculty of the Built Environment									
Bachelor of Engineering and Architecture (Hons.)	21	13	34	21	29	50	23	32	55
Total	**21**	**13**	**34**	**21**	**29**	**50**	**23**	**32**	**55**
Faculty of Arts									
Bachelor of Arts	39	19	58	25	16	41	55	18	73

	2007-8			2008-9			2009-10		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Bachelor of Arts (Hons.)	123	61	184	123	55	178	116	52	168
Total	**162**	**50**	**242**	**148**	**71**	**219**	**171**	**70**	**241**
Faculty of Dental Surgery									
Bachelor of Dental Surgery	3	2	5	2	4	6	2	3	5
Total	**3**	**2**	**5**	**2**	**4**	**6**	**2**	**3**	**5**
Faculty of Economics, Management and Accountancy									
Bachelor of Accountancy (Hons.)	38	28	66	49	30	79	38	26	64
Bachelor of Arts (Hons.) in Social Policy/Social Work	52	12	64	41	8	49	35	15	50
Bachelor of Arts (Hons.) in Social Work/Social Administration	0	0	0	0	0	0	1	0	1
Bachelor of Arts (Hons.) Tourism Studies	0	0	0	27	9	3	14	4	18
Bachelor of Arts in Tourism Studies	9	1	10	5	0	5	0	0	0
Bachelor of Commerce	69	66	135	67	91	158	71	46	117
Bachelor of Commerce (Hons.)	65	57	122	65	52	117	62	55	117
Bachelor of Science in Business and Computing	13	11	24	21	26	47	12	15	27
Diploma in Commerce	6	1	7	6	8	14	12	14	26
Diploma in Management Studies	27	18	45	27	29	56	32	13	45
Diploma in Political Studies	0	0	0	0	0	0	0	1	1
Total	**279**	**194**	**473**	**308**	**253**	**528**	**277**	**189**	**466**
Faculty of Education									

	2007-8			2008-9			2009-10		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Bachelor of Arts (Hons.) in Youth and Community Studies	21	10	31	0	0	0	7	4	11
Bachelor of Arts in Youth and Community Studies	1	0	1	0	0	0	0	0	0
Bachelor of Education (Hons.)	92	30	122	107	33	140	80	13	93
Bachelor of Psychology (Hons.)	56	13	69	61	7	68	62	10	72
Diploma in Facilitating Inclusive Education	91	4	95	61	7	68	96	6	102
Diploma in Youth Studies	3	0	3	0	0	0	1	1	1
Total	**264**	**57**	**321**	**229**	**47**	**276**	**246**	**34**	**279**
Faculty of Engineering									
Bachelor of Engineering (Hons.)	14	54	68	7	23	33	27	53	80
Total	**14**	**54**	**68**	**7**	**23**	**33**	**27**	**53**	**80**
Faculty of Information and Communication Technology									
Bachelor of Science (Hons.) in Information Technology	14	36	50	4	44	48	13	38	51
Bachelor of Science in Information Technology	0	2	2	0	1	1	0	2	2
Diploma in Information Technology	1	9	10	0	1	1	12	38	51
Total	**15**	**47**	**62**	**4**	**46**	**50**	**25**	**78**	**104**
Faculty of Law									
Bachelor of Laws	66	52	118	7	35	102	69	42	111
Diploma of Notary Public	84	34	118	60	45	105	67	33	100
Diploma Legal Procurator	0	1	1	2	1	5	0	1	1

	2007-8			2008-9			2009-10		
	F	M	TOT	F	M	TOT	F	M	TOT
Total	**150**	**87**	**227**	**69**	**81**	**212**	**136**	**76**	**212**
Faculty of Medicine and Surgery									
Bachelor of Pharmacy (Hons.)	23	3	26	24	4	28	23	7	30
Total	**23**	**3**	**26**	**24**	**4**	**28**	**23**	**7**	**30**
Faculty of Science									
Bachelor of Science	0	5	5	3	3	6	5	4	9
Bachelor of Science (Hons.)	34	19	53	28	27	55	38	32	70
Total	**34**	**24**	**57**	**31**	**30**	**61**	**33**	**36**	**79**
Faculty of Theology									
Bachelor of Arts (Hons.) in Theology	8	5	13	0	0	0	15	9	24
Bachelor of Arts in Theology and Human Studies	3	11	14	0	7	7	0	6	6
Bachelor of Sacred Theology	0	6	6	0	9	9	1	6	7
Diploma in Religious Studies	1	0	1	1	1	2	0	0	0
Licentiate in Sacred Theology	0	1	1	0	3	3	0	4	4
Total	**12**	**23**	**35**	**1**	**20**	**21**	**16**	**25**	**41**
Institute of Conservation and Management of Cultural Heritage									
Bachelor in Conservation and Restoration Studies (Hons.)	3	1	4	10	14	0	4	8	12
Total	**3**	**1**	**4**	**10**	**14**	**0**	**4**	**8**	**12**
Institute of Healthcare/Faculty of Health Sciences									
Bachelor of Science	0	0	0	0	0	1	1	2	2
Bachelor of Health Science (Hons).	67	27	94	108	38	146	117	32	149
Diploma in Health Science	31	14	45	25	11	36	19	9	28

	2007-8			2008-9			2009-10		
	F	M	TOT	F	M	TOT	F	M	TOT
Total	**98**	**41**	**139**	**133**	**49**	**183**	**137**	**43**	**179**
Institute of Agriculture									
Diploma in Agriculture	5	16	21	0	0	0	0	0	0
Bachelor of Science (Hons.) in Mediterranean Agro-Systems Management	6	20	26	0	1	1	3	6	9
Total	**11**	**36**	**47**	**0**	**1**	**1**	**13**	**6**	**9**
Institute of Criminology									
Diploma in Criminology	0	0	0	2	1	3	2	1	3
Diploma in Probation Services	0	0	0	0	0	0	6	28	34
Bachelor of Arts in Criminology (Hons.)	28	11	39	0	0	0	0	0	0
Total	**28**	**11**	**39**	**2**	**1**	**3**	**8**	**29**	**37**
Institute of Public Administration and Management									
Diploma in Public Administration	8	10	18	0	1	1	13	8	21
Total	**8**	**10**	18	0	**1**	**1**	**13**	**8**	**21**
Mediterranean Academy of Diplomatic Studies									
Diploma in Diplomatic Studies	3	7	10	0	0	0	3	5	8
Total	**3**	**7**	**10**	0	0	0	**3**	**5**	**8**

Table: Graduates at LEVEL 7 & 8 per Faculty and Course 1999-2003

	1999-2000			2000-1			2001-2			2002-3		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology												
M.Phil.	1	0	1	0	0	0	0	1	1	0	0	0
Total	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
European Documentation and Research Centre												
M.A. European Studies	2	5	7	8	5	13	0	0	0	0	0	0
Total	**2**	**5**	**7**	**8**	**5**	**13**	**0**	**0**	**0**	**0**	**0**	**0**
Faculty of Architecture and Civil Engineering												
M.Sc. Conservation Technology	0	0	0	6	3	9	0	0	0	0	0	0
P/G Diploma in Conservation Technology	0	3	3	0	0	0	0	2	2	0	0	0
M.S. Env. Planning & Management	1	5	6	1	1	2	1	0	1	0	0	0
M. Phil	0	1	1	0	0	0	0	0	0	0	0	0
Total	**1**	**9**	**10**	**7**	**4**	**11**	**1**	**2**	**3**	**0**	**0**	**0**
Faculty of Arts												
M.A.	11	10	21	10	13	23	11	11	22	8	9	17
M. Philosophy	0	2	2	2	1	3	0	0	0	1	0	1
M.A. Baroque Studies	6	2	8	0	0	0	0	0	0	5	3	8
Ph.D	1	0	1	0	4	4	0	7	7	2	4	6
Total	**18**	**14**	**32**	**12**	**18**	**30**	**11**	**18**	**29**	**16**	**16**	**32**
Faculty of Economics, Management and Accountancy												
M. Business Administration	5	13	18	4	5	9	5	25	30	7	29	36
Exec. M. Business Administration	0	0	0	4	24	28	0	0	0	0	0	0
M.A. Financial Services	3	7	10	6	15	21	2	12	14	4	9	13

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Magister Juris	3	4	7	5	7	12	0	0	0	0	0	0
M.A. Economics	0	0	0	0	0	0	0	0	0	5	7	12
Total	**11**	**24**	**35**	**19**	**51**	**70**	**7**	**37**	**44**	**16**	**45**	**61**
Faculty of Education												
Postgraduate Certificate in Education	92	32	124	65	24	89	63	23	86	54	14	68
M. Education	4	6	10	6	3	9	2	2	4	4	4	8
M. Psychology	0	0	0	9	2	11	9	2	11	0	0	0
P/G Certificate Inclusion and Special Education Needs	0	0	0	0	0	0	5	1	6	0	0	0
Ph.D	0	0	0	0	0	0	0	0	0	1	0	1
Total	**4**	**6**	**10**	**15**	**5**	**20**	**16**	**5**	**21**	**5**	**4**	**9**
Faculty of Engineering												
M.Sc. Engineering	0	0	0	0	13	13	0	2	2	0	8	8
M. Phil	0	1	1	0	2	2	0	1	1	0	0	0
Ph.D	0	0	0	0	1	1	0	1	1	0	0	0
Total	**0**	**1**	**1**	**0**	**16**	**16**	**0**	**4**	**4**	**0**	**8**	**8**
Faculty of Law												
M.A. Human Rights & Democratization	0	0	0	17	14	31	1	0	1	22	16	38
Doctor of Law	42	37	79	59	55	114	169	54	112	42	21	63
Total	**0**	**0**	**0**	**17**	**69**	**145**	**170**	**0**	**1**	**22**	**16**	**38**
Faculty of Medicine & Surgery												
M.D.	17	42	59	25	39	64	23	33	56	16	22	38
M.Sc. (Public Health Medicine)	0	0	0	0	1	1	0	1	1	0	0	0

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
M.Sc. (Medicine & Surgery)	0	0	0	0	0	0	0	0	0	2	7	9
M. Phil	2	1	3	1	0	1	1	2	3	2	1	3
M. Phil (Dentistry)	0	0	0	0	1	1	1	0	1	0	0	0
Ph.D	1	0	1	0	0	0	0	2	2	0	0	0
Total	**20**	**43**	**63**	**26**	**41**	**67**	**25**	**38**	**63**	**20**	**30**	**50**
Faculty of Science												
M. Phil	0	1	1	0	0	0	0	0	0	0	1	1
M. Science	2	5	7	12	14	26	6	8	14	5	10	15
Ph.D	1	1	2	0	0	0	0	0	0	0	0	0
Total	**3**	**7**	**10**	**12**	**14**	**26**	**6**	**8**	**14**	**5**	**11**	**16**
Faculty of Theology												
M.A Theology & Human Studies	0	1	1	1	1	2	1	2	3	3	1	4
Ph.D (Theology)	1	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**2**	**3**	**3**	**1**	**4**
Institute for Islands and Small States												
M.A. Small States	0	0	0	0	0	0	0	0	0	0	4	4
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**4**
Institute of Healthcare												
Post Qual. Diploma in Health Service Mang.	0	0	0	13	5	18	0	0	0	0	0	0
Post. Qualification in Nutrition	0	0	0	1	2	3	0	0	0	0	0	0
M.H.Sc. (Environmental Health)	0	1	1	1	0	1	0	0	0	0	0	0

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
M.H.Sc. Nursing/Midwifery Education	4	3	7	0	0	0	0	0	0	0	0	0
M.Sc. Health Service Management	0	0	0	3	9	12	2	5	7	1	4	5
Total	**4**	**4**	**8**	**18**	**16**	**34**	**2**	**5**	**7**	**1**	**4**	**5**
Institute of Agriculture												
M.Sc. Agriculture	1	0	1	2	4	6	1	2	3	1	1	2
M. Phil Agriculture	1	10	11	5	12	17	1	0	1	0	0	0
M.Sc. Agriculture and Veterinary Pharmacy	0	1	1	3	1	4	3	0	3	0	0	0
Ph.D	0	0	0	0	0	0	0	1	1	0	0	0
Total	**2**	**11**	**13**	**10**	**17**	**27**	**5**	**3**	**8**	**1**	**1**	**2**
European Centre for Gerontology												
Master of Gerontology and Geriatrics	0	0	0	1	3	4	2	1	3	0	1	1
Postgraduate Diploma in Gerontology and Geriatrics	8	11	19	4	9	13	0	6	6	4	0	4
Total	**8**	**11**	**19**	**5**	**12**	**17**	**2**	**7**	**9**	**4**	**1**	**5**
Institute of Linguistic Studies												
M. Phil	0	0	0	1	0	1	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
Mediterranean Institute												
M. Phil	0	0	0	1	0	1	0	0	0	1	1	2
Total	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**2**
Mediterranean Academy of Diplomatic Studies												
P/G Diploma in Diplomatic Studies	0	0	0	0	0	0	2	0	2	0	0	0

	1999-2000			2000-1			2001-2			2002-3		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
P/G Diploma in Diplomacy	0	0	0	0	0	0	0	0	0	1	1	2
Master in Diplomatic Studies	5	10	15	4	5	9	1	5	6	5	10	15
Master of Arts in Diplomatic Studies	2	6	8	1	9	10	0	0	0	5	6	11
Ph.D	0	1	1	0	0	0	0	0	0	0	0	0
Total	**7**	**17**	**24**	**5**	**14**	**19**	**3**	**5**	**8**	**11**	**17**	**28**

Table: Graduates at LEVEL 7 & 8 per Faculty and Course 2003-07

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology												
Master of Arts	0	0	0	9	10	19	0	1	1	11	6	17
Total	**0**	**0**	**0**	**9**	**10**	**19**	**0**	**1**	**1**	**11**	**6**	**17**
European Documentation and Research Centre												
Master of Arts in European Studies	7	8	15	10	11	21	0	0	0	2	5	7
Total	**7**	**8**	**15**	**10**	**11**	**21**	**0**	**0**	**0**	**2**	**5**	**7**
Edward De Bono Institute for the Design and Development of Thinking												
Master of Arts in Creativity and Innovation	0	0	0	0	0	0	5	5	10	10	9	19
Total	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**10**	**10**	**9**	**19**
Euro-Mediterranean Centre for Educational Research												
Master of Arts in Comparative Euro-Mediterranean Education Studies	0	0	0	0	0	0	0	0	0	0	1	1
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
European Centre for Gerontology												
Master of Gerontology and Geriatrics	0	2	2	2	1	3	0	0	0	1	0	1
Postgraduate Diploma in Gerontology and Geriatrics	3	1	4	3	6	9	5	1	6	3	3	6
	3	**3**	**6**	**5**	**7**	**12**	**5**	**1**	**6**	**4**	**3**	**7**
Faculty of Architecture and Civil Engineering												
M.Sc. Road Engineering	0	0	0	2	11	13	0	0	0	0	0	0
M.Sc. Env. Planning & Management	4	5	9	1	0	1	0	0	0	0	0	0
Doctor of Philosophy	0	0	0	0	0	0	0	1	1	0	0	0

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Total	**4**	**5**	**9**	**3**	**11**	**14**	**0**	**1**	**1**	**0**	**0**	**0**
Faculty of Arts												
Ph.D in Archaeology	0	0	0	0	0	0	0	0	0	1	0	1
Ph.D in Philosophy	0	0	0	0	0	0	1	0	1	0	0	0
Ph.D Maltese	0	1	1	0	2	2	0	0	0	0	0	0
Master in Contemporary Diplomacy	0	0	0	0	0	0	6	9	15	4	7	11
Master in Interpreting	0	0	0	0	0	0	0	0	0	1	1	2
Master in Translation	0	0	0	0	0	0	0	0	0	8	2	10
Master in Translating and Interpreting	0	0	0	0	0	0	16	6	22	3	0	3
Master of Arts	19	11	30	0	0	0	21	7	28	31	15	46
Master of Arts in Linguistics	0	1	1	3	1	4	2	0	2	1	1	2
Postgraduate diploma in Interpreting	0	0	0	0	0	0	8	1	9	3	1	4
Postgraduate diploma in Translation	0	0	0	0	0	0	16	7	23	8	3	11
Total	**19**	**12**	**31**	**3**	**1**	**4**	**70**	**30**	**100**	**59**	**30**	**89**
Faculty of Dental Surgery												
Doctor of Philosophy in Dental Surgery	0	0	0	0	0	0	0	0	0	1	0	1
Master of Science	0	0	0	0	0	0	0	0	0	2	0	2
Master of Philosophy of Dental Surgery	0	0	0	0	0	0	1	0	0	0	0	0
Total	**6**	**4**	**10**	**4**	**11**	**15**	**1**	**0**	**0**	**0**	**0**	**0**
Faculty of Economics, Management and Accountancy												

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Executive Master of Business Administration	8	18	26	21	54	75	10	25	35	7	15	22
Executive Master of Business Administration (E-business)	0	0	0	0	0	0	1	10	11	3	14	17
Master of Arts in Economics	4	6	10	4	4	8	6	4	10	6	5	11
Master of Arts of Competitive Law	0	0	0	2	3	5	0	0	0	0	0	0
Master of Arts in Public Policy	0	0	0	3	4	7	0	2	2	2	2	4
Master of Business Administration	0	0	0	0	0	0	11	12	23	8	5	13
Ph.D Economics	0	0	0	0	1	1	0	0	0	0	0	0
Ph.D Finance and Banking	0	0	0	0	0	0	0	1	1	0	0	0
Total	**12**	**24**	**36**	**30**	**66**	**96**	**28**	**54**	**82**	**26**	**41**	**67**
Faculty of Education												
Master of Education	9	4	13	4	2	6	8	2	10	4	4	8
Master of Psychology	0	0	0	0	0	0	0	0	0	8	2	10
Postgraduate Certificate in Education	34	8	42	47	13	60	67	16	83	61	16	77
Postgraduate Diploma in Education Administration & Management	0	0	0	0	0	0	0	0	0	47	32	79
Postgraduate Diploma in Education (Inclusion and Individual Educational Needs in Primary Schools)	0	0	0	0	0	0	0	0	0	4	1	5
Postgraduate Diploma in School Counselling	0	0	0	0	0	0	8	4	12	0	0	0
Ph.D Education	0	0	0	0	1	1	0	0	0	0	0	0

	2003-4			2004-5			2005-6			2006-7		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
M.A. Baroque Studies	1	0	1	1	3	4	0	0	0	0	0	0
Ph.D Theatre Studies	0	1	1	0	0	0	0	0	0	0	0	0
Ph.D Geography	0	0	0	0	1	1	0	0	0	0	0	0
Total	**44**	**13**	**57**	**52**	**20**	**72**	**83**	**22**	**105**	**124**	**55**	**179**
Faculty of Engineering												
Doctor of Philosophy in Engineering	0	0	0	0	0	0	0	1	1	0	1	1
Master of Science in Engineering	0	4	4	0	5	0	0	7	7	1	5	6
M.Phil. Engineering	0	0	0	1	0	1	0	0	0	0	0	0
Total	**0**	**4**	**4**	**1**	**5**	**1**	**0**	**8**	**8**	**1**	**6**	**7**
Faculty of Law												
Magister Juris in European And Comparative Law	0	0	0	0	0	0	9	5	14	7	6	13
Magister Juris in International Law	0	0	0	0	0	0	0	1	1	0	2	2
Master of Arts in Financial Law	0	0	0	0	0	0	6	9	15	0	2	2
Master of Arts in Human Rights and Democratization	0	0	0	0	0	0	23	20	43	30	16	46
Master of Arts in Law	0	0	0	0	0	0	0	1	1	0	0	0
Doctor of Law	54	47	101	40	39	79	44	46	90	58	23	67
Total	**0**	**0**	**0**	**0**	**0**	**0**	**82**	**82**	**164**	**37**	**26**	**63**
Faculty of Medicine and Surgery												
Doctor of Medicine and Surgery	13	24	37	38	30	68	20	28	48	0	1	1
Doctor of Philosophy in Pathology	0	0	0	0	0	0	0	0	0	0	2	2
Doctor of Philosophy in Physiology and Biochemistry	0	0	0	0	0	0	1	0	1	2	1	3

	2003-4			2004-5			2005-6			2006-7		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Doctor of Philosophy in Medicine	0	0	0	0	0	0	0	0	0	1	0	1
Master of Science	0	0	0	0	0	0	1	0	1	6	2	8
M.Sc. (Medicine & Surgery)	1	2	3	6	11	17	0	0	0	0	0	0
Ph.D Pharmacy	0	1	1	0	0	0	0	0	0	0	0	0
M. Philosophy (clinical Pharmacology)	0	0	0	1	0	1	0	0	0	0	0	0
M. Philosophy (Obstetrics & Gynaecology)	0	0	0	0	1	1	0	0	0	0	0	0
M. Phil Pathology	1	0	0	0	0	0	0	0	0	0	0	0
Doctor of Philosophy in Public Health	0	0	0	0	0	0	1	0	1	0	0	0
M. Phil Molecular Genetics	1	0	0	0	0	0	0	0	0	0	0	0
Total	**16**	**27**	**41**	**45**	**42**	**87**	**23**	**28**	**51**	**9**	**6**	**15**
Faculty of Science												
Doctor of Philosophy in Physics	0	0	0	0	0	0	0	0	0	0	1	10
Doctor of Philosophy in Biology	0	0	0	0	0	0	0	1	1	0	0	0
Master of Science	4	10	14	6	15	21	9	12	21	3	10	13
Total	**4**	**10**	**14**	**6**	**15**	**21**	**9**	**13**	**22**	**3**	**11**	**23**
Faculty of Theology												
Master of Arts in Theology	0	0	0	0	0	0	3	1	4	4	3	7
Master of Arts in Theology and Human Studies	2	0	1	0	1	1	0	3	3	2	1	3
Doctor of Sacred Theology	0	0	0	0	0	0	0	1	1	0	0	0
Total	**2**	**0**	**1**	**0**	**1**	**1**	**3**	**5**	**8**	**6**	**4**	**10**

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Institute for Islands and Small States												
Master of Arts in Islands and Small States Studies	3	0	3	1	0	1	11	3	14	8	13	21
Total	**3**	**0**	**3**	**1**	**0**	**1**	**11**	**3**	**14**	**8**	**13**	**21**
Institute for Masonry and Construction Research												
Master of Science in Conservation Technology for Masonry Buildings	0	0	0	0	0	0	0	0	0	0	2	2
M. Phil Masonry & Conservation Research	0	0	0	1	0	1	1	0	1	0	0	0
M.Sc. Masonry & Conservation Research	0	1	1	2	2	4	0	0	0	0	0	0
P/G Diploma in Cons Tech for Masonry Bldg	4	0	4	0	1	1	1	1	2	0	0	0
Total	**4**	**1**	**5**	**3**	**3**	**6**	**2**	**1**	**3**	**0**	**2**	**2**
Institute of Healthcare												
Master of Health Science	11	5	16	1	1	2	9	0	9	4	1	5
Postgraduate Diploma in Health Science	0	0	0	0	0	0	10	9	19	11	4	15
Total	**11**	**5**	**16**	**1**	**1**	**2**	**19**	**9**	**28**	**15**	**5**	**20**
Institute for Conservation and Management of Cultural Heritage (Heritage Malta)												

	2003-4			2004-5			2005-6			2006-7		
	F	M	TOT	F	M	TOT	F	M	TOT	F	M	TOT
Master of Conservation in Applied Conservation Studies	0	0	0	0	0	0	0	2	2	1	1	2
Master of Conservation in Applied Conservation Studies	0	0	0	0	0	0	9	2	11	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**4**	**13**	**1**	**1**	**2**
Institute of Agriculture												
Master of Science in Agricultural Science	1	2	3	0	0	0	0	0	0	0	2	2
M.Sc. Agriculture and Veterinary Sciences	0	1	1	2	0	2	0	0	0	0	0	0
Ph.D Agriculture	1	1	2	0	0	0	0	0	0	0	0	0
M. Phil Agriculture	0	1	1	0	0	0	0	0	0	0	0	0
Total	**2**	**5**	**7**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2**
Mediterranean Academy of Diplomatic Studies												
Master in Diplomacy	6	5	11	7	7	14	3	9	12	6	6	12
Master of Arts in Diplomatic Studies	7	8	15	0	0	0	9	12	21	10	7	17
P/G Diploma in Diplomacy	0	0	0	0	0	0	0	0	0	0	1	1
P/G diploma in Contemporary Diplomacy	3	6	9	10	11	21	0	0	0	3	3	6
Total	**16**	**19**	**35**	**17**	**18**	**35**	**12**	**21**	**33**	**19**	**17**	**36**
Mediterranean Institute												
Doctor of Music	0	0	0	0	0	0	0	0	0	0	1	1
Master of Music	0	0	0	0	1	1	0	1	1	1	0	1

	2003-4			2004-5			2005-6			2006-7		
	F	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**	**F**	**M**	**TOT**
Master of Philosophy in Music Studies	0	0	0	0	0	0	0	0	0	0	1	1
Total	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**1**	**2**	**3**

Table: Graduates at Level 7 & 8 per Faculty and Course 2007-2010

	2007-2008			2008-2009			2009-2010		
	F	M	TOT	F	M	TOT	F	M	TOT
Centre for Communication Technology									
Master of Arts	1	0	1	1	11	12	0	0	0
M.Phil	0	0	0	0	1	1	0	0	0
Master of Science	0	0	0	1	6	7	0	0	0
Total	**1**	**0**	**1**	**2**	**18**	**20**	**0**	**0**	**0**
European Documentation and Research Centre									
M.A. European Studies	4	6	10	9	3	12	6	4	10
Total	**4**	**6**	**10**	**9**	**3**	**12**	**6**	**4**	**10**
Edward Debono Institute for the design and development of thinking									
Master of Arts in Creativity and Innovation	12	2	14	1	0	1	3	4	7
Total	**12**	**2**	**14**	**1**	**0**	**1**	**3**	**4**	**7**
Faculty of the Built Environment									
M.Sc. in Road Engineering	7	1	8	0	0	0	0	0	0
P/G Diploma in Conservation Technology	0	1	1	0	0	0	0	1	1
M.S. Env. Planning & Management	0	0	0	0	0	0	0	0	0
M. Phil	0	0	0	0	0	0	0	0	0
Total	**7**	**2**	**9**	**0**	**0**	**0**	**0**	**1**	**1**
Faculty of Arts									
Postgraduate Diploma in Interpreting	4	2	6	5	2	7	3	1	4
Postgraduate Diploma in Translation	19	7	26	6	4	10	1	5	6
Master in Contemporary Diplomacy	3	2	5	2	3	5	1	0	1
Master in Translation	4	2	6	3	0	3	10	7	17
M.A.	19	14	33	22	17	39	19	10	29

	2007-2008			2008-2009			2009-2010		
	F	M	TOT	F	M	TOT	F	M	TOT
M. Philosophy	0	0	0	0	0	0	0	0	0
M.A. Baroque Studies	0	0	0	0	0	0	0	0	0
Ph.D	0	2	2	1	3	4	0	3	3
Total	**49**	**29**	**78**	**40**	**26**	**64**	**34**	**26**	**60**
Faculty of Economics, Management and Accountancy									
M. Business Administration	11	12	23	6	6	12	1	2	3
Exec. M. Business Administration	8	5	13	0	0	0	12	20	22
M.A. Financial Services	0	0	0	0	0	0	0	0	0
Magister Juris	0	0	0	0	0	0	0	0	0
M.A. Economics	6	1	7	2	9	11	2	8	10
M.A. Public policy	3	3	6	6	2	8			
Ph.D	1	1	2	0	0	0	1	0	1
Total	**29**	**22**	**51**	**14**	**17**	**31**	**16**	**30**	**36**
Faculty of Education									
Postgraduate Certificate in Education	68	28	96	103	37	140	65	20	85
Master in Youth and Community Studies	4	1	5	6	3	9	4	3	7
M. Education	31	13	44	35	15	50	21	8	29
M. Psychology	0	0	0	8	2	10	0	0	0
Master in Early Childhood Education and Care	0	0	0	17	0	17	3	0	3
P/G Certificate Inclusion and Special Education Needs	0	0	0	0	0	0	0	0	0
Postgraduate Diploma in Education (Administration and Management)	17	10	27	21	14	35	0	0	0
Postgraduate Diploma in lifelong Career Guidance and Development	12	4	16	0	0	0	0	0	0
Ph.D	1	0	1	0	0	0	0	0	0
Total	**133**	**56**	**189**	**190**	**71**	**261**	**93**	**31**	**124**

	2007-2008			2008-2009			2009-2010		
	F	M	TOT	F	M	TOT	F	M	TOT
Faculty of Engineering									
M.Sc. Engineering	0	0	0	0	6	6	2	2	4
M.Sc. Integrated Product Development	0	0	0	0	0	0	0	3	3
M. Phil	1	3	4	0	2	2	0	0	0
Ph.D	0	2	2	0	0	0	0	0	0
Total	**1**	**5**	**6**	**0**	**8**	**8**	**2**	**5**	**7**
Faculty of Law									
Master of Arts in Financial Services	0	0	0	7	5	12	6	5	11
M.A. Human Rights & Democratization	3	0	3	0	0	0	4	0	4
Doctor of Law	58	30	88	56	50	106	80	34	114
Total	**61**	**30**	**91**	**63**	**55**	**118**	**90**	**39**	**129**
Faculty of Information and Communication Technology									
Ph.D	0	0	0	0	0	0	0	1	1
MPhil	0	0	0	0	0	0	0	1	1
Master in Information Technology	0	0	0	0	0	0	1	7	8
Master of Science	0	0	0	0	0	0	1	5	6
Total	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	**16**
Faculty of Medicine & Surgery									
M.D.	31	19	50	36	25	61	34	18	52
M.Sc. (Public Health Medicine)	0	0	0	0	0	0	0	0	0
M.Sc. (Medicine & Surgery)	0	0	0	0	0	0	2	7	9
M. Phil	1	0	1	0	0	0	0	0	0
M. Sc. (Pharmacology/ Clinical Pharmacology)	0	0	0	0	0	0	6	1	7
Ph.D	0	2	2	1	1	2	0	1	1

	2007-2008			2008-2009			2009-2010		
	F	M	TOT	F	M	TOT	F	M	TOT
Total	**32**	**21**	**53**	**37**	**26**	**63**	**42**	**27**	**69**
Faculty of Science									
M. Phil	0	0	0	0	0	0	7	8	15
M. Science	4	10	14	0	0	0	0	0	0
Ph.D	0	0	0	0	0	0	0	2	2
Total	**4**	**10**	**14**	**0**	**0**	**0**	**7**	**10**	**17**
Faculty of Theology									
M.A Theology & Human Studies	5	4	9	6	7	13	0	0	0
Master of Arts in Pastoral Studies	0	0	0	0	0	0	0	1	1
Master of Arts in Theology	0	0	0	0	0	0	7	9	16
M.Phil	0	0	0	0	0	0	1	0	1
Ph.D (Theology)	0	0	0	0	2	2	0	0	0
Total	**5**	**4**	**9**	**6**	**9**	**15**	**8**	**10**	**18**
Institute for Islands and Small States									
M.A. Small States	1	4	5	8	2	10	1	3	4
Total	**1**	**4**	**5**	**8**	**2**	**10**	**0**	**0**	**0**
Institute of Healthcare									
Post Qual. Diploma in Health Service Mang.	6	2	8	7	5	12	1	0	1
Post. Diploma in Nutrition	0	0	0	0	0	0	4	1	5
M.Sc. Health Service Management	7	1	8	25	11	36	5	6	11
Total	**13**	**3**	**16**	**32**	**16**	**48**	**10**	**7**	**17**
Institute of Agriculture									
M.Sc. Agriculture	0	1	1	0	0	0	0	0	0
M.Sc. Agriculture and Veterinary Pharmacy	6	20	26	0	0	0	0	0	0

	2007-2008			2008-2009			2009-2010		
	F	M	TOT	F	M	TOT	F	M	TOT
Ph.D	0	0	0	0	0	0	1	0	1
Total	**6**	**21**	**27**	**0**	**0**	**0**	**1**	**0**	**1**
European Centre for Gerontology									
Master of Gerontology and Geriatrics	0	1	1	1	0	1	0	0	0
Postgraduate Diploma in Gerontology and Geriatrics	5	3	8	3	1	4	3	1	4
Total	**5**	**4**	**9**	**4**	**1**	**5**	**3**	**1**	**4**
Mediterranean Institute									
Master in Science	0	0	0	0	0	0	0	2	2
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**
Mediterranean Academy of Diplomatic Studies									
P/G Diploma in Diplomatic Studies	0	0	0	0	0	0	0	0	0
P/G Diploma in Diplomacy	0	0	0	0	0	0	0	0	0
Master in Diplomatic Studies	3	7	10	6	6	12	20	6	26
Master of Arts in Diplomatic Studies	11	7	18	8	11	19	0	0	0
Total	**14**	**14**	**28**	**14**	**17**	**31**	**20**	**6**	**26**

ERASMUS Statistics

Table: Allocation of Funds for ERASMUS programme (students and staff)

Year*	Allocation of funds (Euros)
2000-1	234,780
2001-2	243,571
2002-3	245,545
2003-4	284,511
2004-5	309,572
2005-6	318,200

*** Source EUPU 2000-2006 report**

ERASMUS students study abroad

Table: Number of students selected for ERASMUS study period

Year	Number of students selected
2006-7	123
2007-8	107
2008-9	135

Table: Number of students selected for ERASMUS study exchange per institutions year

Year	Number of students selected	
	UoM	ITS
2006-7	123	0
2007-8	105	2
2008-9	131	4

UoM – University of Malta

MCAST- Malta College of Arts, Science and Technology

ITS – Institute of Tourism Studies

Table: Number of males and females on mobility per year for 2007-9

Year	Males		Females		Total	
	No.	%	No.	%	No.	%
University of Malta						
2006-7	36	29.27	87	70.73	**123**	**100**
2007-8	37	35.24	68	64.76	**105**	**100**
2008-9	44	33.59	87	66.41	**131**	**100**

Table: Area of Study of students on exchange at UoM

Area of study	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
01	0	0	0	0	1	0.76

02	4	3.25	4	3.81	0	0.00
03	1	0.81	0	0.00	5	3.82
04	2	1.63	3	2.86	3	2.29
05	2	1.63	3	2.86	2	1.53
06	7	5.69	6	5.71	9	6.87
07	5	4.07	3	2.86	0	0.00
08	5	4.07	2	1.90	7	5.34
09	19	15.45	8	7.62	8	6.11
10	15	12.20	15	14.29	25	19.08
11	3	2.44	7	6.67	0	0.00
12	46	37.40	41	39.05	46	35.11
13	2	1.63	0	0.00	4	3.05
14	10	8.13	9	8.57	14	10.69
15	2	1.63	4	3.81	7	5.34
16	0	0.00	0	0.00	0	0.00
Total	**123**	**100**	**105**	**100.00**	**131**	**100.00**

Area of Study of students on exchange:

01 – Agricultural Sciences
02 – Architecture, Urban and Regional Planning
03 – Art and Design Sciences
04 – Business Studies & Management
05 – Education, Teacher Training
06 – Engineering, Technology
07 – Geography, Geology
08 – Humanities
09 – Languages & Philological Sciences
10 – Law
11 – Mathematics, Informatics
12 – Medical Sciences
13 – Natural Sciences
14 – Social Sciences
15 – ICT
16 – other areas

Table: Final Degree to be obtained by students on exchange 2000-2006 at UoM

Degree	2006-7		2007-8	
	No.	%	No.	%
Bachelor of Engineering & Architecture (Hons.)	4	3.25	4	3.81
B. Communications	1	0.81	3	2.86
B. Pharmacy	14	11.38	0	0.00
B. Psychology	3	2.44	0	0.00
B. Ed (Hons..)	0	0.00	3	2.86
B. Engineering	7	5.69	5	4.76
Conservation in Conservation and Restoration studies	1	0.81	1	0.95
B. Science (Hons..)	1	0.81	1	0.95
B. Science (Nursing)	8	6.50	11	10.48
Diploma in Health Science (Nursing)	4	3.25	5	4.76
B. Science (Midwifery)	0	0.00	2	1.90
B. Science (Communication Therapy)	4	3.25	0	0.00
B. Science (Physiotherapy)	4	3.25	7	6.67
B. Science Hons.. (Medical Laboratory Science)	0	0	2	1.90
B. Sc IT (Hons..)	1	0.81	3	2.86
BA (Hons..)	31	25.20	18	17.14
BA (Tourism Studies)	2	1.63	0	0.00
B. European Studies	3	2.44	3	2.86
B. Sc (Hons..) Computer Science and Artificial Intelligence and Mathematics	0	0.00	1	0.95
B.Sc Business & Computing	0	0	3	2.86
B. Science (Radiotherapy)	12	9.76	12	11.43
LLD	12	9.76	15	14.29
M. Science (Engineering)	0	0.00	2	1.90
M. Phil	0	0.00	1	0.95
M. Arts	3	2.44	0	0.00
MA Anthropology	1	0.81	0	0.00
MA Human Rights	3	2.44	0	0.00
MSc. Computer & Artificial Intelligence	0	0	1	0.95
MA Cognitive Neuroscience	2	1.63	0	0.00
MA History of Arts	1	0.81	0	0.00
MA Computer science	1	0.81	0	0.00
Master in Health Science	0	0	2	1.90
Total	**123**	**100**	**105**	**100**

Table: Country of institutions visited period 2007-2009 at UoM

Country visited	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
Austria	2	1.63	0	0.00	0	0
Belgium	6	4.88	3	2.86	11	8.40
Czech Republic	2	1.63	1	0.95	1	0.76
Denmark	5	4.07	4	3.81	10	7.63
Finland	4	3.25	9	8.57	14	10.69
France	13	10.57	1	0.95	2	1.53
Germany	6	4.88	0	0.00	1	0.76
Greece	0	0	0	0	1	0.76
Ireland	14	11.38	14	13.33	11	8.40
Italy	36	29.27	30	28.57	31	23.66
Lithuania	0	0	0	0	2	1.53
Netherlands	5	4.07	5	4.76	6	4.58
Norway	0	0	2	1.90	1	0.76
Poland	1	0.81	3	2.86	4	3.05
Portugal	6	4.88	2	1.90	2	1.53
Romania	1	0.81	0	0.00	0	0.00
Slovenia	0	0	1	0.95	0	0.00
Spain	3	2.44	3	2.86	4	3.05
Sweden	5	4.07	5	4.76	7	5.34
Turkey	0	0	1	0.95	0	0.00
United Kingdom	14	11.38	21	20.00	23	17.56
Total	**123**	**100.00**	**105**	**100.00**	**131**	**100.00**

Table: Length of visit by ERASMUS students for the period 2007-2009 at UoM

Length of Visit (Months)	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
1.0	0	0	0	0	3	2.33
1.5	0	0	1	0.95	0	0.00
1.75	1	0.81	0	0.00	0	0.00
2	1	0.81	0	0.00	0	0.00
2.5	0	0	1	0.95	0	0.00
3.0	44	35.77	31	29.52	42	32.56
3.25	12	9.76	8	7.62	7	5.43
3.5	7	5.69	14	13.33	6	4.65
3.6	0	0.00	0	0.00	0	0.00
3.75	10	8.13	3	2.86	3	2.33
4.0	8	6.50	19	18.10	23	17.83
4.25	10	8.13	1	0.95	12	9.30
4.5	11	8.94	8	7.62	11	8.53
4.75	4	3.25	4	3.81	6	4.65
5.0	7	5.69	8	7.62	7	5.43

5.25	3	2.44	1	0.95	2	1.55
5.5	0	0.00	1	0.95	2	1.55
5.75	1	0.81	1	0.95	0	0.00
6.0	1	0.81	1	0.95	0	0.00
7.0	0	0.00	0	0.00	0	0.00
7.5	0	0.00	0	0.00	0	0.00
8.0	0	0.00	0	0.00	0	0.00
8.25	0	0	1	0.95	0	0.00
8.5	0	0	0	0	1	0.78
8.75	0	0.00	1	0.95	0	0.00
9.0	3	2.44	0	0.00	3	2.33
9.25	0	0	1	0.95	0	0.00
9.5	0	0	0	0.00	0	0.00
9.75	0	0	0	0	1	0.78
Total	**123**	**100**	**105**	**100.00**	**129**[1]	**100.00**

Table: Value of Grant Received by ERASMUS students for the period 2007-2009 at UoM

Value of Grant €	**2006-7**		**2007-8**		**2008-9**	
	No.	%	**No.**	**%**	**No.**	**%**
<500	0	0.00	0	0.00	6[2]	3.85
751-1000	0	0.00	0	0.00	0	0.00
1001-1250	0	0.00	0	0.00	4	3.08
1251-1500	5	4.07	1	0.96	38	29.23
1501-1750	38	30.89	0	0.00	6	4.62
1751-2000	22	17.89	17	16.35	26	20.00
2001-2250	15	12.20	12	11.54	18	13.85
2251-2500	12	9.76	29	27.88	9	6.92
2501-2750	15	12.20	20	19.23	18	13.85
2751-3000	10	8.13	3	2.88	3	2.31
3001-3250	1	0.81	13	12.50	0	0.00
3251-3500	0	0.00	0	0.00	0	0.00
3501-3750	0	0.00	3	2.88	0	0.00
3751-4000	0	0.00	0	0.00	1	0.77
4001-4250	0	0.00	1	0.96	0	0.00
4251-4500	0	0.00	0	0.00	2	1.54
4501-4750	0	0.00	1	0.96	0	0.00
4751-5000	0	0.00	0	0.00	0	0.00
>5000	3	2.44	4	3.85	0	0.00
Total	**121**[3]	**100**	**104**[4]	**100.00**	**131**	**100.00**

Table: Distribution of students on ERASMUS visits across gender 2006-2007 at UoM

Country visited	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
Austria	0	0	2	1.63	2	1.63
Belgium	0	0.00	6	4.88	6	4.88
Czech Republic	2	0.02	0	0.00	2	1.63
Denmark	2	0.02	3	2.44	5	4.07
Finland	1	0.01	3	2.44	4	3.25
France	2	0.02	11	8.94	13	10.57
Germany	1	0.01	5	4.07	6	4.88
Ireland	5	0.04	9	7.32	14	11.38
Italy	10	0.08	26	21.14	36	29.27
Netherlands	2	0.02	3	2.44	5	4.07
Poland	0	0.00	1	0.81	1	0.81
Portugal	4	0.03	2	1.63	6	4.88
Romania	0	0.00	1	0.81	1	0.81
Spain	0	0.00	3	2.44	3	2.44
Sweden	0	0.00	5	4.07	5	4.07
United Kingdom	7	0.06	7	5.69	14	11.38
Total	**36**	**0.29**	**87**	**70.73**	**123**	**100.00**

Table: Distribution of students on ERASMUS visits across gender 2007-2008 at UoM

Country visited	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
Austria	0	0.00	0	0	0	0
Belgium	1	0.95	2	1.90	3	2.86
Czech Republic	1	0.95	0	0.00	1	0.95
Denmark	2	1.90	2	1.90	4	3.81
Finland	1	0.95	8	7.62	9	8.57
France	1	0.95	0	0.00	1	0.95
Greece	0	0.00	0	0.00	0	0.00
Germany	0	0.00	0	0.00	0	0.00
Ireland	2	1.90	12	11.43	14	13.33
Italy	8	7.62	22	20.95	30	28.57
Netherlands	2	1.90	3	2.86	5	4.76
Norway	2	1.90	0	0.00	2	1.90
Poland	2	1.90	1	0.95	3	2.86
Portugal	0	0.00	2	1.90	2	1.90
Slovenia	0	0.00	1	0.95	1	0.95
Spain	1	0.95	2	1.90	3	2.86
Sweden	1	0.95	4	3.81	5	4.76
Turkey	1	0.95	0	0.00	1	0.95
United Kingdom	14	13.33	7	6.67	21	20.00
Total	**39**	**37.14**	**66**	**62.86**	**105**	**100.00**

Table: Distribution of students on ERASMUS visits across gender 2008-2009 at UoM

Country visited	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
Austria	0	0	0	0	0	0
Belgium	1	0.76	10	7.63	11	8.40
Czech Republic	1	0.76	0	0.00	1	0.76
Denmark	5	3.82	5	3.82	10	7.63
Finland	6	4.58	8	6.11	14	10.69
France	0	0.00	2	1.53	2	1.53
Germany	1	0.76	0	0.00	1	0.76
Greece	1	0.76	0	0.00	1	0.76
Ireland	0	0.00	11	8.40	11	8.40
Italy	11	8.40	20	15.27	31	23.66
Lithuania	1	0.76	1	0.76	2	1.53
Netherlands	2	1.53	4	3.05	6	4.58
Norway	0	0.00	1	0.76	1	0.76
Poland	4	3.05	0	0.00	4	3.05
Portugal	1	0.76	1	0.76	2	1.53
Spain	1	0.76	3	2.29	4	3.05
Sweden	2	1.53	5	3.82	7	5.34
United Kingdom	7	5.34	16	12.21	23	17.56
Total	**44**	**33.59**	**87**	**66.41**	**131**	**100.00**

Table: Area of Study of students on exchange by gender 2006-2007at UoM

Area of study	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
02	0	0	4	3.25	4	3.25
03	0	0.00	1	0.81	1	0.81
04	0	0.00	2	1.63	2	1.63
05	0	0.00	2	1.63	2	1.63
06	5	4.07	2	1.63	7	5.69
07	3	2.44	2	1.63	5	4.07
08	1	0.81	4	3.25	5	4.07
09	6	4.88	13	10.57	19	15.45
10	4	3.25	11	8.94	15	12.20
11	0	0.00	3	2.44	3	2.44
12	12	9.76	34	27.64	46	37.40
13	4	3.25	6	4.88	10	8.13
14	0	0.00	2	1.63	2	1.63
15	0	0.00	2	1.63	2	1.63
16	0	0.00	0	0.00	0	0.00
Total	**35**	**28.46**	**88**	**71.54**	**123**	**100.00**

Area of Study of students on exchange:

02 – Architecture, Urban and Regional Planning 03 – Art and Design

04 – Business Studies & Management Sciences 05 – Education, Teacher Training

06 – Engineering, Technology
07 – Geography, Geology
08 – Humanities
09 – Languages & Philological Sciences
10 – Law
11 – Mathematics, Informatics
12 – Medical Sciences
13 – Natural Sciences
14 – Social Sciences
15 – Communication & Inf. Science
16- Other Areas of Study

Table: Area of Study of students on exchange by gender 2007-2008 at UoM

Area of study	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
02	2	1.90	2	1.90	4	3.81
03	0	0.00	0	0.00	0	0.00
04	3	2.86	0	0.00	3	2.86
05	2	1.90	1	0.95	3	2.86
06	6	5.71	0	0.00	6	5.71
07	1	0.95	2	1.90	3	2.86
08	1	0.95	1	0.95	2	1.90
09	5	4.76	3	2.86	8	7.62
10	5	4.76	10	9.52	15	14.29
11	4	3.81	3	2.86	7	6.67
12	5	4.76	36	34.29	41	39.05
13	0	0.00	0	0.00	0	0.00
14	3	2.86	6	5.71	9	8.57
15	1	0.95	3	2.86	4	3.81
16	0	0.00	0	0.00	0	0.00
Total	**38**	**36.19**	**67**	**63.81**	**105**	**100.00**

Area of Study of students on exchange:

02 – Architecture, Urban and Regional Planning
03 – Art and Design
04 – Business Studies & Management Sciences
05 – Education, Teacher Training
06 – Engineering, Technology
07 – Geography, Geology
08 – Humanities
09 – Languages & Philological Sciences
10 – Law
11 – Mathematics, Informatics
12 – Medical Sciences
13 – Natural Sciences
14 – Social Sciences
15 – Communication & Inf. Science
16- Other Areas of Study

Table: Area of Study of students on exchange by gender 2008-2009 at UoM

Area of study	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
14	1	0.76	1	0.76	2	1.53
32	1	0.76	6	4.58	7	5.34
34	1	0.76	2	1.53	3	2.29
38	10	7.63	15	11.45	25	19.08
62	0	0.00	1	0.76	1	0.76
212	4	3.05	1	0.76	5	3.82
221	0	0.00	1	0.76	1	0.76
222	1	0.76	3	2.29	4	3.05
223	1	0.76	2	1.53	3	2.29
225	0	0.00	1	0.76	1	0.76
226	2	1.53	3	2.29	5	3.82
311	1	0.76	1	0.76	2	1.53
312	0	0.00	1	0.76	1	0.76
313	0	0.00	6	4.58	6	4.58
345	2	1.53	3	2.29	5	3.82
443	2	1.53	2	1.53	4	3.05
521	4	3.05	2	1.53	6	4.58
522	0	0.00	1	0.76	1	0.76
581	2	1.53	1	0.76	3	2.29
723	8	6.11	23	17.56	31	23.66
725	3	2.29	8	6.11	11	8.40
729	1	0.76	3	2.29	4	3.05
Total	**44**	**33.59**	**87**	**66.41**	**131**	**100.00**

Area of Study of students on exchange:

14 – teacher training & education science
32 – social science
34 – Communication & Information Technology
38 – Law
62 – Agricutlure, forestry & fishery
212 – Music & Performing Arts
221 – Religion
222 – Foreign Language
223 – Mother Tongue
225 – History & Archaeology
226 – Philosophy & Ethics
311 – Psychology
312 – Sociology & Cultural Studies
313 – Political Science & civics
345 – Management & Administration
443 – Earth Science
521 – Mechanics & Metal Work
522 – Electricity & Energy
581 – Architrecture & Town Planning
723 – Nursing & Caring
725 – Medical diagnostic & treatment technology
729 – Health (others)

ERASMUS students on placement abroad[94]

Table: Number of students selected for ERASMUS on placement

Year	Number of students selected
2006-7	N/A
2007-8	10
2008-9	16

Table: Number of Students on Erasmus placement per Institution per year

Year	UoM	MCAST	ITS	Total
2007-8	9	0	1	10
2008-9	7	7	2	16

UoM – University of Malta

MCAST- Malta College of Arts, Science and Technology

ITS – Institute of Tourism Studies

Table: Number of males and females on placement mobility per year

Year	Males		Females		Total	
	No.	%	No.	%	No.	%
University of Malta						
2007-8	1	11.11	8	88.89	9	100
2008-9	0	0	7	100	7	100
Malta College for Arts, Science and Technology						
2007-8	0	0	0	0	0	0
2008-9	2	28.57	5	71.43	7	100
Institute of Tourism Studies						
2007-8	1	100	0	0	1	100
2008-9	2	100	0	0	2	100

Table: Area of Placement of students on exchange

Area of study	2007-8		2008-9	
	No.	%	No.	%
Pharmacy	0	0	7	100
Medical Sciences	9	100	0	0
Total	**9**	**100**	**7**	**100**
Agribusiness	0	0	2	28.57
Business & Commerce	0	0	5	71.43
Total	**0**	**0**	**7**	**100**
Hotel Operations	**1**	**100**	**2**	**100**

94 Tables do not include the year 2006-7 as this action did not exist

Table: Country of placement for period 2007-2009

Country visited	2007-8		2008-9	
	No.	%	No.	%
University of Malta				
Belgium	2	22.22	0	0
Italy	3	33.33	4	57.14
Spain	2	22.22	2	28.57
United Kingdom	2	22.22	1	14.29
Total	**9**	**100**	**7**	**100**
Malta College for Arts, Science & Technology				
Italy	0	0	2	28.57
Belgium	0	0	5	71.43
Total	**0**	**0**	**7**	**100**
Institute of Tourism Studies				
Belgium	1	100	1	50
Latvia	0	0	1	50
Total	**1**	**100**	**2**	**100**

Table: Length of visit by ERASMUS placement for the period 2007-2009

Length of Visit (Month)	2007-8		2008-9	
	No.	%	No.	%
University of Malta				
3.25	0	0.00	1	14.29
3.75	2	22.22	0	0.00
4.0	5	55.56	6	85.71
4.25	2	22.22	0	0.00
Total	**9**	**100**	**7**	**100**
Malta College for Arts, Science & Technology				
3.0	**0**	**0**	**7**	**100**
Institute of Tourism Studies				
3.0	1	100	0	0
12.0	0	0	2	0
Total	**1**	**100**	**2**	**100**

Table: Value of Grant Received by ERASMUS students for placement for period 2007-2009

Value of Grant	2007-8		2008-9	
	No.	%	No.	%
University of Malta				
2001-2250	0	0	2	28.57
2251-2500	0	0	4	57.14
2501-2750	0	0	1	14.29
3251-3500	3	33.33	0	0.00
3501-3750	2	22.22	0	0
3751-4000	2	22.22	0	0
4251-4500	2	22.22	0	0
Total	**9**	**100**	**7**	**100**
Malta College of Arts, Science & Technology				
1500-1750	**0**	**0**	**7**	**100**
Institute of Tourism Studies				
1750-2000	1	100	0	0
7000-7250	0	0	2	100
Total	**1**	**100**	**2**	**100**

Table: Distribution of students on ERASMUS visits across gender 2007-2008

Country visited	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
University of Malta						
Belgium	0	0	2	22.22	2	20
Italy	1	100	3	33.33	4	40
Spain	0	0	2	22.22	2	20
United Kingdom	0	0	2	22.22	2	20
Total	**1**	**100**	**9**	**100.00**	**10**	**100**
Institute of Tourism Studies						
Belgium	**1**	**100**	**0**	**0**	**1**	**100**

Table: Distribution of students on ERASMUS visits across gender 2008-2009

Country visited	Male		Female		TOTAL	
	No.	%	No.	%	No.	%
University of Malta						
Italy	0	0	4	57.14	4	57.14
Spain	0	0	2	28.57	2	28.57
United Kingdom	0	0	1	14.29	1	14.29
Total	**0**	**0**	**7**	**100.00**	**7**	**100.00**
Malta College of Arts, Science & Technology						
Italy	1	14.29	1	14.29	2	28.57
Belgium	1	14.29	4	57.14	5	71.43
Total	**2**	**28.57**	**5**	**71.43**	**7**	**100.00**
Institute of Tourism Studies						
Belgium	1	50	0	0	1	50
Latvia	1	50	0	0	1	50
Total	**2**	**100**	**0**	**0**	**2**	**100**

ERASMUS

Teaching Staff Mobility

Table: Number of Teaching Staff on Erasmus per Institution per year

Year	UoM	MCAST	ITS
2006-7	51	0	4
2007-8	38	2	7
2008-9	37	5	8

UoM – University of Malta

MCAST- Malta College of Arts, Science and Technology

ITS – Institute of Tourism Studies

Table: Number of male and female teaching staff on mobility per year

Year	Males		Females		Total	
	No.	%	No.	%	No.	%
University of Malta						
2006-7	22	43.14	29	56.86	51	100
2007-8	28	71.79	11	28.21	39	100
2008-9	19	52.78	18	50.00	36	100
Malta College for Arts Science & Technology						
2006-7	0	0	0	0	0	0
2007-8	2	100	0	0	2	100
2008-9	3	60	2	40	5	100
Institute of Tourism Studies						
2006-7	0	0	4	100	4	100
2007-8	4	47.14	3	42.86	7	100
2008-9	4	50	4	50	8	100

Table: Area of Study of Teaching Staff on exchange at UoM

Area of study	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
University of Malta						
01	2	3.92	0	0	1	2.70
02	3	5.88	2	5.26	1	2.70
03	3	5.88	3	7.89	4	10.81
04	1	1.96	0	0.00	0	0.00
05	7	13.73	6	15.79	3	8.11
06	3	5.88	1	2.63	5	13.51
07	0	0.00	0	0.00	0	0.00
08	4	7.84	4	10.53	0	0.00
09	9	17.65	5	13.16	3	8.11
10	2	3.92	1	2.63	1	2.70
11	3	5.88	2	5.26	2	5.41
12	6	11.76	8	21.05	8	21.62
13	1	1.96	0	0.00	1	2.70
14	3	5.88	1	2.63	5	13.51
15	2	3.92	2	5.26	1	2.70
16	2	3.92	3	7.89	2	5.41
Total	**51**	**100.00**	**38**	**100.00**	**37**	**100.00**

Table: Area of Study of Teaching Staff on exchange at MCAST

Area of study	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
Malta College of Arts, Science & Technology						
211	N/A	N/A	0	0	1	20
342	N/A	N/A	0	0	1	20
345	N/A	N/A	0	0	1	20
461	N/A	N/A	1	50	0	0
523	N/A	N/A	0	0	2	40
562	N/A	N/A	1	50	0	0
Total	**N/A**	**N/A**	**2**	**100**	**5**	**100**
Institute of Tourism Studies						
3	N/A	N/A	0	0	2	25
99	N/A	N/A	0	0	1	12.5
225	N/A	N/A	0	0	1	12.5
345	N/A	N/A	0	0	3	37.5
541	N/A	N/A	0	0	1	12.5
345	N/A	N/A	7	100	0	0
TOTAL	**N/A**	**N/A**	**7**	**100**	**8**	**100**

Area of Study of students on exchange:

01 – Agricultural Sciences

02 – Architecture, Urban and Regional Planning

03 – Art and Design

04 – Business Studies and Management Sciences

05 – Education, Teacher Training
06 – Engineering, Technology
07 – Geography, Geology
08 – Humanities
09 – Lang. & Philological Sciences
10 – Law
11 – Mathematics, Informatics
12 – Medical Sciences
13 – Natural Sciences
14 – Social Sciences
15 – Comm. & Information Sciences
16 – Other Areas of Study
211 – Fine Arts
342 – Marketing and Advertising
345 – Management & Administration
461 – Mathematics
523 – Electronics & Automation
99 – Other Areas of study
225 – History and Archaeology
541 – Materials and manufacturing

Table: Country of institutions visited by Teaching Staff at UoM

Country visited	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
University of Malta						
Austria	2	3.92	1	2.63	1	2.70
Belgium	4	7.84	1	2.63	1	2.70
Czech Rep	3	5.88	2	5.26	3	8.11
Denmark	0	0.00	0	0.00	1	2.70
Finland	8	15.69	0	0.00	2	5.41
France	0	0.00	4	10.53	0	0.00
Germany	6	11.76	4	10.53	1	2.70
Greece	0	0.00	1	2.63	0	0.00
Hungary	0	0.00	1	2.63	0	0.00
Ireland	1	1.96	1	2.63	0	0.00
Italy	7	13.73	6	15.79	6	16.22
Latvia	0	0.00	0	0.00	1	2.70
Lithuania	0	0.00	0	0.00	0	0.00
Netherlands	1	1.96	1	2.63	1	2.70
Norway	1	1.96	1	2.63	0	0.00
Poland	1	1.96	1	2.63	3	8.11
Portugal	0	0.00	0	0.00	1	2.70
Spain	2	3.92	3	7.89	1	2.70
Slovakia	1	1.96	1	2.63	0	0.00
Sweden	4	7.84	2	5.26	4	10.81
Turkey	1	1.96	0	0.00	0	0.00
United Kingdom	9	17.65	8	21.05	11	29.73
Total	**51**	**100**	**38**	**100**	**37**	**100**

Table: Country of institutions visited by Teaching Staff at MCAST & ITS

Malta College of Arts, Science & Technology						
Belgium	0	0	0	0	2	40
Portugal	0	0	2	100	2	40
UK	0	0	0	0	1	20
Total	**0**	**0**	**2**	**100**	**5**	**100**
Institute of Tourism Studies						
Belgium	0	0	2	33.33	3	42.86
Cyprus	0	0	2	33.33	1	14.29
Germany	0	0	2	33.33	0	0.00
Spain	0	0	0	0	2	28.57
Sweden	0	0	0	0	1	14.29
Total	**0**	**0**	**6**	**100**	**7**	**100**

Table: Length of visit of Teaching Staff exchange

Length of Visit (Days)	2006-7		2006-7		2006-7	
	No.	%	No.	%	No.	%
University of Malta						
2	1	1.96	0.00	0	0	0
3	5	9.80	2	5.26	0	0.00
4	6	11.76	3	7.89	5	13.51
5	22	43.14	6	15.79	7	18.92
6	8	15.69	5	13.16	1	2.70
7	4	7.84	20	52.63	22	59.46
8	3	5.88	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00
11	1	1.96	0	0.00	0	0.00
12	0	0.00	0	0.00	1	2.70
14	1	1.96	1	2.63	1	2.70
Total	**51**	**100.00**	**38**	**100**	**37**	**100**
Malta College for Arts, Science & Technology						
4.0	0	0	2	100	4	80
5.0	0	0	0	0	1	20
Total	**0**	**0**	**2**	**100**	**5**	**100**
Institute of Tourism Studies						
4.0	0	0	0	0	2	0
5.0	0	0	7	100	6	0
Total	**0**	**0**	**7**	**100**	**8**	**100**

Table: Number of Teaching Hours

Number of Hours	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
University of Malta						
8	30	58.82	23	60.53	10	27.03
9	1	1.96	1	2.63	2	5.41
10	5	9.80	5	13.16	2	5.41
11	0	0.00	0	0.00	2	5.41
12	9	17.65	6	15.79	0	0.00
13	1	1.96	0	0.00	0	0.00
14	0	0.00	0	0.00	0	0.00
15	2	3.92	1	2.63	0	0.00
16	2	3.92	0	0.00	0	0.00
18	0	0.00	0	0.00	1	2.70
19	0	0.00	0	0.00	0	0.00
20	1	1.96	2	5.26	1	2.70
24	0	0.00	0	0.00	0	0.00
Total	**51**	**100**	**38**	**100**	**37**	**100**
Malta College for Arts, Science & Technology						
6.0	0	0	2	100	0	0
7.0	0	0	0	0	5	100
Total	**0**	**0**	**2**	**100**	**5**	**100**
Institute of Tourism Studies						
4.0	0	0	0	0	6	75
5.0	0	0	0	0	2	25
6.0	**0**	**0**	**7**	**100**	**8**	**100**

Table: Value of Grant Received by University Staff

Value of Grant (€)	2006-7		2007-8		2008-9	
	No.	%	No.	%	No.	%
University of Malta						
401-600	3	5.88	1	2.63	1	2.78
601-800	46	90.20	14	36.84	8	22.22
801-1000	0	0.00	15	39.47	14	38.89
1001-1200	0	0.00	7	18.42	10	27.78
1201-1400	1	1.96	0	0.00	2	5.56
1401-1600	1	1.96	0	0.00	0	0.00
1601-1800	0	0.00	1	2.63	1	2.78
1801-2000	0	0.00	0	0.00	0	0.00
TOTAL	**51**	**100**	**38**	**100**	**36**[5]	**100**

Malta College for Arts, Science & Technology						
600-800	0	0	0	0	2	40
801-1000	0	0	0	0	3	60
1201-1400	0	0	2	100	0	0
Total	**0**	**0**	**2**	**100**	**5**	**100**
Institute of Tourism Studies						
601-800	0	0	7	100	0	0
801-1000	0	0	0	0	2	28.57
1001-1200	0	0	0	0	2	28.57
1201-1400	0	0	0	0	3	42.86
Total	**0**	**0**	**7**	**100**	**7**	**100**

ERASMUS Teaching Staff Mobility

Table: Number of Administrative Staff on Erasmus per Institution per year

Year	UoM	MCAST	ITS
2007-8	2	2	0
2008-9	10	7	7

UoM – University of Malta

MCAST – Malta College of Arts, Science and Technology

ITS – Institute of Tourism Studies

Table: Number of male and female administrative staff on mobility per year

Year	Males		Females		Total	
	No.	%	No.	%	No.	%
University of Malta						
2007-8	0	0	2	100	2	100
2008-9	3	30	7	70	10	100
Malta College for Arts, Science & Technology						
2007-8	2	100	0	0	2	100
2008-9	4	57.1	3	42.9	7	100
Institute of Tourism Studies						
2007-8	0	0	0	0	0	0
2008-9	2	28.57	5	71.43	7	100

Table: Country of institutions visited by Administrative staff from the three institutions

Country visited	2007-8		2008-9	
	No.	%	No.	%
Belgium	0	0	2	8.33
Cyprus	0	0	1	4.17
Ireland	0	0	5	20.83
Italy	0	0	4	16.67
Spain	2	100	3	12.50
Sweden	0	0	1	4.17
Turkey	0	0	1	4.17
United Kingdom	0	0	7	29.17
Total	**44**	**100**	**24**	**100**

Table: Length of visit of Administrative Staff exchange

Length of Visit (Days)	2006-7		2006-7	
	No.	%	No.	%
University of Malta				
7	2	100	18	75
8	0	0	5	20.83
29	0	0	1	4.17
Total	2	100	33	100

Table: Value of Grant Received by University Administrative Staff

Value of Grant (€)	2007-8		2008-9	
	No.	%	No.	%
University of Malta				
401-600	0	0	1	4.17
601-800	0	0	2	8.33
801-1000	2	100	8	33.33
1001-1200	0	0	7	29.17
1201-1400	0	0	5	20.83
>2000	0	0	1	4.17
TOTAL	2	100	33	100

Entities and organisations contacted in for the compilation of this document

Actavis – Training Manager
Carlo Gavazzi – HR Manager
Chiswich House School (Head of School)
Crimson Wing – Hr Manager
Crystal Financial Investments – Director
EC Language School (HR Manager)
Education Division (Director + education officer)
HSBC – HR
ITS - Institute of Tourism Studies;
MCAST – Malta College of Arts, Science & Technology;
University of Malta – Registrar's office;
University of Malta - APQRU
Malta Enterprise
Malta Council for Science and Technology;
Mater Dei – HR Manager
Methode – HR Manager
MFSA – Director
MITA – HR Manager
NSTS Language School (responsible for running school)
St. James Hospital (Capua) – HR Manager
Philip Toledo – HR Manager
Trelleborg – HR Manager

(Table Footnotes)

1	2 students returned after 1 week away	p.129
2	This list includes those students who came back early and did not get any grant	p.129
3	Two students who stayed less than 3 months were not given any grant	p.129
4	One student who stayed less than 3 months was not given any grant	p.129
5	One person dropped out	p.141

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